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Technologies of Social Change: Mapping the Infrastructure of the Occupy Movement from #OccupyWallStreet to #OccupySandy

A dissertation submitted in partial satisfaction of the requirements for the degree of Doctor of Philosophy

in

Sociology (Science Studies)

by

Joan Donovan

Committee in charge:

University of California, San Diego
Professor Martha Lampland, Chair
Professor Geoffrey Bowker
Professor Manuel Castells
Professor Kelly Gates
Professor Isaac Martin
Professor Charles Thorpe

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University of California, San Diego

DEDICATION

For my wife, Nathalie

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VITA

2006	Bachelor of Arts, Sociology, Concordia University Montreal QC
2008	Master of Arts, Sociology, Concordia University Montreal QC
2015	Doctor of Philosophy, Sociology (Science Studies), University of California, San Diego San Diego CA

PUBLICATIONS

Terranova, T. and Donovan, J. 2013. "Occupy Social Networks: The Paradoxes of using Corporate Social Media in Networked Movements" in Geert Lovink and Miriam Rasch (eds.) *Unlike Us: Social Media Monopolies and their Alternatives*. Amsterdam: Institute of Network Cultures.

Donovan, J., Baker, Karen S. 2011. "The Shape of Information Management: Fostering Collaboration across Data, Science, and Technology in a Design Studio." Scripps Institution of Oceanography. University of California eScholarship.

FIELDS OF STUDY

Major Field: Sociology (Science Studies)

Studies in Sociology of Social Movements Professors Isaac Martin and Manuel Castells

Studies in Science and Technology Studies Professors Martha Lampland and Charles Thorpe

Studies in Communication and Information Technology Professors Kelly Gates, and Geoffrey Bowker

ABSTRACT OF THE DISSERTATION

Technologies of Social Change: Mapping the Infrastructure of the Occupy Movement from #OccupyWallStreet to #OccupySandy

by

Joan Marie Donovan

Doctor of Philosophy in Sociology (Science Studies)

University of California, San Diego 2015

Professor Martha Lampland, Chair

This dissertation is an ethnographic account of the information and communication technologies used by networked social movements, particularly Occupy, to communicate and coordinate campaigns and actions. Studying networked social movements is difficult because they diverge from the classic theories of social movement formation due to their lack of leaders, capacity to mobilize large groups quickly, decentralized decision-making, and heavy reliance on networked communication technologies. Networked social movements gain coherence by

leveraging the connective capacity of information and communication technologies to forge new social solidarities across space, time, and ideologies.

While many studies have investigated the social media presence of networked movements such as Occupy, 15m, and the Arab Spring, few identify the invisible work that goes into managing media for these large-scale uprisings or unearth what kinds of skills, knowledge, and resources are necessary to build and sustain networked movements. My fieldwork attends to these shortfalls, while also contributing a thorough account of the history of the Occupy movement and the political implications for structuring collective action in this way. Since October 2011, I have participated in the construction of a communication platform, called InterOccupy.net, designed to mitigate problems caused by the failure of email and social media to communicate strategic and tactical plans for direct action. By situating my research within the developing infrastructure of InterOccupy, my study documents the Occupy movement's increased organizational capacity and strategic use of resources at the very moment when other scholars were writing Occupy's obituary.

CHAPTER ONE

A Revolution in Keywords

"Her name is Anarchy." - V from V for Vendetta

June 14th, 2011, two protest groups set up encampments in New York City mere blocks from one another. One occupation, titled "A99: Operation Empire State Rebellion," targeted Wall Street bankers. This group was largely organized by members of Anonymous, the internet activist group. They abandoned their camp at Zuccotti Park when only four people showed up with tents. The other occupation at New York City Hall was called "Bloombergville" and was headed by CUNY students and professors who sought to prevent a series of budget cuts from taking effect. Interestingly, both groups used different strategies to organize their occupations. The social media used to garner interest in Operation Empire State Rebellion (#OpESR) led to ample online conversation about how an occupation of Wall Street could change the world as the Egyptians did in Tahrir Square. Yet, when it was time to occupy, hardly anyone came. Conversely, the members of Bloombergville accomplished much in the way of grassroots organizing to get committed individuals to occupy City Hall, but they used little social media to promote the event. This strategy resulted in a fair turnout with little dwindling support. It was the chance meet up of these two groups on that day that launched the campaign to Occupy Wall Street in September 2011.

In this dissertation, I layout the history of Occupy Wall Street as told through the communication infrastructure used by the movement to communicate with itself. Admittedly, it is a strange way to tell a history of a social movement because infrastructure foregrounds groups' strategic adoption of certain technologies at particular moments in order to meet their needs and produce different outcomes. Following Star and Ruhleder (1996), infrastructure means the tethering of people, technologies, and ideas within the same information ecology. By mapping the transformations in infrastructure at critical (and not so critical) moments in the movement's evolution, I illustrate how the complexity of communication within the encampments mirrored the challenges faced by those who took on the project of building a communication commons for the movement. Significantly, I surface the networks that developed using communications technologies, like conference calls and websites, at a time when many placed substantial emphasis on the power of social media to bring movements together. By way of introduction, I continue with the example of the merger of Bloombergville and #OpESR to highlight how different groups used diverse strategies, both online and off, to coordinate the call to Occupy Wall Street on September 17, 2011.

The story of Occupy Wall Street begins much earlier with an independent news website, *Amped Status*.¹ On February 15, 2010, Amped Status journalist, David DeGraw, published the beginning of a six part series detailing the specter of financial terrorism, which opened with this proposal, "It's time for 99% of Americans to mobilize and aggressively move on common sense political reforms." In DeGraw's reports were part of the origins of the 99% rhetoric that so permeated the Occupy

¹ For more information, visit www.ampedstatus.com Last accessed 5/20/2015

² For the Full report: http://ampedstatus.org/full-report-the-economic-elite-vs-the-people-of-the-united-states-of-america/#terror Last accessed 5/20/2015

Movement in the fall of 2011.³ The servers that hosted these reports were promptly hacked and *Amped Status* turned to Anonymous, a group of loosely connected internet activists, for help. As their relationship grew, some members of Anonymous and Amped Status formed their own social network: A99.⁴

The first communique calling for #OpESR was issued on March 12, 2011 and demanded that those in charge of the Federal Reserve be held accountable for rigging markets. While this communication was not accompanied by a call for physical direct action, the second communication on June 11, 2011 "Ctrl+Alt+Bernanke" asked that people to "occupy a public space" until Bernanke steps down. Like the Occupy Movement, these protests in public space were to be distributed across the US. #OpESR's location was set for Zuccotti Park because of its proximity to Wall Street. Other protests were set up in different areas and were linked together on a map:

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³ Others attribute the adoption of the 99% vs 1% to an article published in Vanity Fair by Joseph Stiglitz published in May 2011, available here: http://www.vanityfair.com/news/2011/05/top-one-percent-201105. Another origin story comes from meetings to organize the September 17th occupation of Wall Street, where protesters from Spain made the suggestion. Last accessed 5/20/2015

⁴ This is a direct link to the hidden social network: http://ampedstatus.org/network/original-99platform. Last accessed 5/20/2015

⁵ The first communique is located at http://www.youtube.com/watch?v=7D6neBzTnOQ Last accessed 5/20/2015

⁶ The second communique: http://www.youtube.com/watch?v=XySGw-g2tyk&feature=related Last accessed 5/20/2015

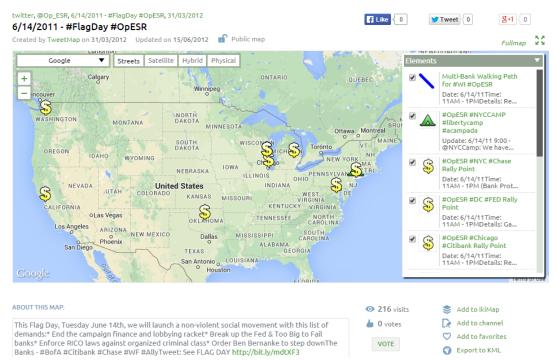


Figure 1.1 Screenshot of a map created by A99 for #OpESR to coordinate distributed protests⁷

Sixteen people showed up to Zuccotti on that Flag Day and only four of them were prepared to camp. ⁸ Because online interest in the action was high, many walked away from the park feeling a sense of disappointment because of the lack of follow through. One #OpESR protester, Gary Roland, left Zuccotti to join up with the occupation of Bloombergville organized by New Yorkers against Budget Cuts. ⁹

Coincidently, the protest against Mayor Bloomberg's budget cuts was revving up a few blocks away from Zuccotti that mimicked the historic Hoovervilles of the great depression. Support for Bloombergville included notable academics Noam

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⁷ Source: www.ikimap.com/map/6142011/-flagday-opesr Last Accessed 5/20/2015

⁸ For a full report on the day's events: http://ampedstatus.org/opesr-status-update-empire-state-rebellion-day-1 Last Accessed 5/20/2015

⁹ For info on New Yorkers against budget cuts see http://nocutsny.wordpress.com/ and Bloombergville http://bloombergvillenow.org/ Last Accessed 5/20/2015

Chomsky, David Harvey, and Francis Fox Piven. ¹⁰ Bloombergville sought to prevent a series of austerity measures imposed by the Mayor. Their chosen tactic was camping on a sidewalk in front of City Hall. Their actions culminated in thirteen arrests on June 28, 2011, when several members barricaded the door to a city building where a vote on the budget was going to be held. What occasioned the serendipitous meeting of the A99 network with the members of Bloombergville was their proximity to the global financial epicenter, Wall Street. Bloombergville set up in front of NY City Hall, just seven blocks from Zuccotti Park, where #OpESR was stationed. That evening, Bloombergville members greeted the retreating A99er, Roland, and an affinity formed instantly. ¹¹ Now with these networks allied, they began planning for a second occupation of Wall Street using a Google Group, Facebook, blogs, and face-to-face meetings as their methods of organizing. The seed of this potential uprising was set to bloom in September.

There are several explanations for the early failure of the #OpESR's occupation of Zuccotti Park. The timing of the call to action and the commitment of occupation as tactic were an issue. While the A99 communiques received hundreds of thousands of views, America is an expansive territory and thus distributes both the centers of power and people across wide distances. There was no way to tell if those watching were able to get to NYC for the day of the protest. As well, the lead time on the video communique to "Occupy Public Space" was only three days and the original

1

¹⁰ For an interview with Yotam Marom about Bloombergville, see http://indyreader.org/content/interview-yotam-marom-lead-organizer-bloombergville Last accessed 5/20/2015

 $^{^{11}}$ For more details about the meeting, see: http://www.huffingtonpost.com/2011/06/15/anonymous-hackers-to-ben-_n_877337.html Last accessed 5/20/2015

call on Facebook only appeared on May 28, 2011. The coordinating website, http://opesr.net, launched on the same day that the occupations were set to lay down camp and only a few people showed up to Zuccotti with camping gear in tow. 13

In his research on social networks, Shirky (2008) suggests that eliciting online dialogue poses distinct challenges, like motivating people to get to your webpage, comment, and then return to respond. If you can overcome that, it is a very different thing to expect widespread coordination to come from that conversation. In his analysis of the open source movement, he goes on to say that coordinating people towards a specific end through voluntary dedication to a project requires a monumental amount of effort by a few well connected organizers. Even though thousands of people knew about the event #OpESR, a few weeks proved not enough time to prepare the public to commit to living in the park until their demands were met.

In addition to timing, there were other barriers to participation. In terms of protesting, Americans are accustomed to rallies and marches that only take a few hours of their time. To ask for a commitment of not just time, but also a revolutionary change in lifestyle remained a big question. Confounding this issue, the A99 demands themselves were already articulated, but not entirely salient to the public:

- 1. End the campaign finance and lobbying racket
- 2. Break up the Fed & Too Big to Fail banks

¹² For the original Facebook group, see

https://www.facebook.com/OpESR#!/note.php?note_id=134289466646691 Last accessed 5/20/2015

¹³ Read the full direct action plan here: http://opesr.net/assembly/going-nyccamp-libertycamp-acampada Last accessed 5/20/2015

- 3. Enforce RICO laws against organized criminal class
- 4. Order Ben Bernanke to step down¹⁴

Did the public know enough about these specific issues to be activated to occupy outdoors?

While Operation Empire State rebellion called for a concession in the form on Bernanke's resignation, Bloombergville demanded an end to austerity in one of the richest cities in the world. As well, Bloombergville did not have a strategic presence online. Only a few updates on the status of their action were issued on the blog and very little information was distributed on social media. Neither group was successful in achieving their desired political outcome, but with these common interests they formed a network that would launch one of the largest and longest protests in American history. In order to do this, the technologically connected networks of Anonymous needed to be grounded in the face-to-face networks of Bloombergville. The coalition that came together would later be known globally as Occupy Wall Street (OWS).

So, how did OWS tether the internet and the streets? First, Anonymous had to make the action public. Anonymous are a widely decentralized group of online activists who congregate in IRC chat rooms and on other less trafficked websites (Coleman 2014). In order to convene an action or operation, a member will enter a chat room, make a blog post, or issue a call as a proposal to other members of the group. Either some will agree to help or the proposed operation will fail. There are no

¹⁴ The demands are listed here: http://ampedstatus.org/opesr-status-update-empire-state-rebellion-day-1 Last accessed 5/20/2015

criteria for membership, so some actions carried out under the name of Anonymous are not always endorsed by all members. The important point is that actions are carried out where no one person receives credit or blame. If the operation was successful it was because the idea was well articulated and produced enough excitement in the network to be carried out. From there, if they need the public's support then they issue public calls to action across social media. In the case of leaks, most of the operation is secretly organized and then the results of the leak are issued to the public.

While Anonymous is known primarily for online acts of civil disobedience,
Occupy Wall Street was not the first time Anonymous helped shape public protests. In
2008, they planned street demonstrations against Scientology and garnered some
media attention. Intriguingly, Coleman (2014) describes the protests against
Scientology, where chatrooms, email lists, and message boards were used to
coordinate a series of distributed protests across the globe (p. 64). #OpESR was a
deployment of a familiar tactic of distributed direct action leveraging the global online
networks to spill out into the streets in over a dozen cities.

More recently in August of 2011, Anonymous organized the #opBART or #muBARTek protests in San Francisco against the BART police who shut down cell service on public transportation during an anti-police rally. Much of these BART protests were organized through Twitter, an online application that spreads text-messages quickly throughout a decentralized network of users using search terms called hashtags (#). Users put # in front of a term they want to make searchable. It also allows users to query #[insert search term] to see what others are saying about that

topic. Twitter is easily accessible on most smart phones and allows for users who do not know each other to communicate with one another. Moreover, after witnessing the effectiveness of the BART protests and the growing support for Anonymous during the Assange/WikiLeaks scandal, many who had never heard of Anonymous were asking questions and looking for information about this group. Anonymous was one of the first groups to push out a series of memes promoting the upcoming protest against Wall Street as well as documenting it as it unfolded (Coleman 2014: 322).

Second, the terms of the protest had to become much broader to capture the widespread public support that #OpESR and Bloombergville were seeking. The idea to Occupy Wall Street was the result of a series of discussions across this group. They reached out to Adbusters, an anti-capitalist magazine headquartered in Canada, to help promote it. They also issued a call for a general assembly meeting in Tompkins Square Park on August 2, 2011 for those interested in planning the protest. During those August meetings, this group along with several others, including veterans of the Spanish 15M movement, formed the New York City General Assembly (NYCGA). While this group was planning the logistical information about the protests, they were in some ways beholden to the missives of Adbusters who had started blogging and sending e-newsletters about the upcoming action.



Figure 1.2 Original poster from Adbusters¹⁵

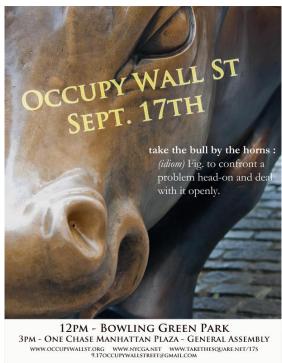


Figure 1.3 Call to action distributed by NYCGA¹⁶

 $^{15}\ Source:\ https://www.adbusters.org/blogs/adbusters-blog/occupywallstreet.html\ Last\ accessed$ 5/20/2015

A comparative analysis of these two posters for the same event lays bare the different strategies for fomenting social movements using information and communication technologies (ICTs). The poster in Adbuster's July 2011 issue began with an invitation: "What is our one demand?" No such question was included on the posters made by organizers in NYC. As well, an Adbusters blog post calling for the Occupation of Wall Street read, "Beginning from one simple demand – a presidential commission to separate money from politics – we start setting the agenda for a new America." While this question allowed for participation on a wide scale, the selection of the presidential commission initially caused a rift between some organizing for the reoccupation and Adbusters. This strategy was counter-intuitive for some community organizers who often seek an "informal consensus" before deciding on a tactic (Polletta 2004: p.182). David DeGraw spoke about the NYCGA's position, "There was a lot of internal debate about these demands. So, we reluctantly said, 'ok what is your demand? We have no demands.' And we thought that was a mistake, but it turned out that was actually brilliant. You know, not having demands gave everyone their own voice." Rather than set the agenda, time-frame, and conditions for leaving the occupation, this turnabout called for open dialogue through participation in general assemblies. Moreover, it allowed participants to define with one another's input what was to be done about the global economic and social crisis. It also preemptively displaced attempts at co-option by political parties. In fact, the decision to reject

¹⁶ Source: http://occupywallst.org/article/occupy-wall-street-flyers/ Last accessed 5/20/2015

¹⁷ For the full text of the blog post, see:http://www.adbusters.org/blogs/adbustersblog/occupywallstreet.html Last accessed 5/20/2015

alignment with traditional political parties is illustrated by the organization of the movement itself around numerous local assemblies using direct democracy to make decisions.

Another difference between the posters reveals the attention to online strategies for coordinating action across many groups. The Adbusters poster read "#OccupyWallStreet." The use of hashtag semantics implicitly signaled to the audience to use Twitter to gather information and participate in discussions about the action. 18 The NYCGA flier, in contrast, did not include the hashtag, but instead listed several websites and an email address to find more information. This pointed to two very different strategies for organizing publics. While Adbusters has its own website with a relatively stable readership, moving the conversation to Twitter allowed for broadcasting to a broader public. For those organizing on the ground in NYC, their websites were dedicated specifically towards the action. In this way, the short list of websites and the email address were the first attempts to coordinate action across online spaces. Throughout this dissertation, I show how the broadcasting capacity of social media affords publics the ability to find one another, but it does not provide the infrastructure necessary to organize a movement for the long-term. Just like tactics, keywords have an expiration date. Adding other platforms is necessary if a moment seeks to become a movement.

As well, scheduling information about the protest was included on the NYCGA flyer, where protesters were to meet in Bowling Green and march to Chase Manhattan Plaza. There is no irony in the fact that a protest against banks was set to

¹⁸ While Facebook allows users to use hashtags in 2014-present, this was not the case in 2011.

meet in a park sponsored by a bank. When the march arrived at the Chase Plaza, it was surrounded by barricades and closed to the public. This was the first test of mobility, but there would be many more to come. Activists planned ahead for situations like this by distributing a map of numerous places the marchers could go to have a general assembly:



Figure 1.4 Map given to marchers by the NYCGA Tactical Committee¹⁹

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¹⁹ The map and an interview with an anonymous protester from the NYCGA can be found here: http://www.newyorker.com/news/news-desk/map-how-occupy-wall-street-chose-zuccotti-park Last accessed 5/20/2015

During the course of researching the few public spaces in Manhattan, activists stumbled on a strange bylaw that required businesses to maintain publicly available green space in trade for building larger rentable spaces. These privately owned public spaces (POPS) were to be open 24 hours a day to the public. In contrast to public parks, which closed at 10pm, POPS were more suitable locations to occupy. Since Chase Plaza was fenced off, Zuccotti (location 2 on the map) became the next destination of the march. Critical to the NYCGA's strategy for seizing space, the paper map was a way to pass information through the crowd and for the organizers to remain anonymous.

Taking Zuccotti Park, a POPS, was a challenge to both the state and the corporation who owned the park, Brookfield Properties. McAdam (1983) contends that occupation is a tactic that creates an obstacle for people in power to achieve their goals. So, what kind of an obstacle is occupation? First and foremost, occupation puts people's bodies into a defined space for a specific purpose of raising awareness and winning concessions from some kind of representative or institutionalized power- an employer, a government official, the police, a corporation, a university, etc. By putting their bodies on the line, protesters risk arrest and physical confrontation with the police. Inspired by the Egyptian revolt that secured the end of Mubarak's reign, the #OpESR protesters were going to live publically in Zuccotti Park until the Federal Reserve was shut down. For Bloombergville, when their occupation was ignored by those voting on the NYC budget, they switched to a blockade tactic to impede the vote. Normally, protesters using occupation as a tactic pick a space that causes a

disruption in the everyday flow of business of government, so that their presence (even in small numbers) inconveniences those they are targeting. In both instances, without a critical mass of people the tactic was unsuccessful.

Because ownership is often thought about in terms of the private sphere, seizing what the commons issues a challenge to the state. This is a critical difference with occupations of privately owned space, where there are clear and enforceable rules about who can and cannot enter at specific times. Those who occupied public parks felt as though they invested in the public park and therefore, the state does not have the right or jurisdiction to throw them out. The slogan "The First Amendment is our Permit' was posted on signs in the park as an effort to deter state intervention. In speaking with the police about the issue of removing a public protest from a public park, a commanding officer remarked to me, "It is difficult to police public space and we had to talk a lot about who was here camping and who was being prevented from using the park." When the values of individualism and defense of equality are coupled with a spirit of the commons, the end result is a birth of a public set to protect the common space and these principles at a cost to their individual freedom. In Zuccotti Park, attempts to remove the public from public space became a double threat to equality as any state intervention is perceived as the state protecting the interests of the wealthy.

But, it was not just an open call for demands that sprouted new encampments across the nation, rather what galvanized and magnified the materialization of the Occupy Movement was the combination of the state's violent reaction to people

assembling and the capacity for many citizens to be the media. A week into the occupation of Zuccotti Park, the NYPD pepper sprayed a small group of women who were already confined by a police barricade. This footage was caught from dozens of angles and quickly spread over the internet. Shortly after the incident, Anonymous posted the name, home address, and phone number of Anthony Bologna, the officer who perpetrated the act. No longer could the blue code of silence protect police from being held publically accountable for their actions. The capacity to capture high definition images and broadcast them via mobile phone was now affordable and pocket-sized. A few days later, the mainstream media picked up this story because of the amount of discussion generated online. The media risked their credibility if they ignored a story that so many were talking about.

In addition to following protests on Twitter and YouTube, other websites,
LiveStream Ustream, provided easy to use platforms for citizen journalism at a very
low start-up cost. Critical to the success of Occupy Wall Street was the early inclusion
of the independent media group, Global Revolution. Global Revolution was an
outgrowth of the Glass Bead Collective that filmed Amy Goodman's arrest at the RNC
in 2008. Global Revolution set up a media workshop in a small area of Zuccotti Park
as well as held an indoor location in Brooklyn to charge cameras and edit video.
Global Revolution streamed almost 24 hours a day from the park and followed the

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²⁰ For a video clip of this, see http://www.youtube.com/watch?v=TZ05rWx1pig Last accessed 5/20/2015

²¹ For more on Global Revolution, see: http://globalrevolution.tv Last accessed 5/20/2015

crowd on direct actions, which allowed people at home to see from the perceptive of those on scene exactly what was happening.

By watching the feeds and then either tweeting or posting on Facebook about it, some who may not consider themselves political were actively participating in the social world of the protesters from their living rooms. Sometimes, those tuned in from their computers unwittingly helped protesters seeking to evade arrest by posting the location of police on Twitter. Others helped more directly by sending pizzas when protesters told the audience they were hungry. Even while the mainstream media ignored OWS, this constant spectacle of protest was readily available for anyone interested. Overtime, those were watching came down to the park to see it for themselves. If they could not get to New York, they organized their own occupation.

Over the fall of 2011, the combined ability to draw from the tactics of the Egyptian revolution and the 15M movement, while concomitantly organizing through face to face meetings, email, blogs, Twitter, Facebook, and print media allowed multiple forums for dialogue to emerge that prompted politically motivated people to self-organize encampments in their own cities. Coupling the strategy of occupying public space with indeterminate conditions for ending the occupation made the events of September 17th in NYC seem like a mysterious and spontaneous outcry of the public. On September 17th, whether people were going to the event alone, with friends, as a spectator, or as a participant, only a few knew what to expect. In fact, many did not even know that people were going to camp at Zuccotti as the day began with protests in Bowling Green Park then moved to a general assembly in Chase Manhattan

Plaza. Colman (2014) recounted heading to Bowling Green for "a day of protest in New York City," not suspecting it to carry on beyond the evening hours (p. 317). When Chase Plaza was thwarted by police, protesters moved to Zuccotti where they remained until November 15, 2011. Concretely, while Bloombergville provided the practice needed to pull off a sustained demonstration with committed attendants, the networks of #OpESR had the technological know-how to leverage social networks with online tools for broadcasting that kept public interest and resources flowing to Zuccotti.

The rise of the Occupy Movement in 2011 was swift and unprecedented, surprising many activists, observers, and researchers of social movements. The political upheaval of 2011 led to citizens occupying public spaces all over the globe from Egypt, Israel, Palestine, Peru, Chile, Spain, Canada, France, Russia, Germany, Japan, Australia, Italy, China, Tunisia, and the USA. Spanish protesters began occupying public squares all over the country on May 15, 2011, thus the name of their movement, 15M. This distributed model of 15M provided American activists with a template. Occupy Wall Street began coordinating in June of 2011 using online discussion forums and local general assemblies, but eventually grew too large and had to change methods of communication in order to coordinate collective action.

By October 15, 2011, there were over 1,500 groups using the Occupy name.²² As weeks turned into months, networking spaces of protest would prove to be a significant challenge for those seeking to build a movement. InterOccupy was a small

²² Data on the amount and locations of encampments are available at www.Occupy.net Last accessed 5/20/2015

group of protesters distributed across the US, who sought to build an infrastructure to allow the movement to communicate with itself. A year later, Occupy Wall Street and InterOccupy would launch its biggest project to date, #OccupySandy. Hurricane Sandy hit the east coast on October 29, 2012 causing \$65 billion in damages and leaving 40,000 people homeless. In the days following the storm, Occupy protesters would rapidly scale a disaster response platform to attend to the needs of New York and New Jersey residents. Occupy Sandy mobilized over 50,000 volunteers, raised \$1.9 million, and politicized the ecological disaster in order to stave off developers. "Mutual aid, not charity" became the motto of the project, but also reflected the values the movement developed while in the camps.

Why Study the Occupy Movement?

There are many questions about how the Occupy Movement developed. How did the tactic of occupation diffuse across the nation? What methods were employed to coordinate actions? Over time, no leadership emerged to engage the press, politicians, or the public. Hundreds of artifacts were circulated including statements, public declarations, press releases, video documentaries, which served as evidence that a movement was happening. The number of participants and the size of encampments continued to grow by the hundreds until city mayors coordinated a clampdown on the occupation of public space in November 2011. How was it possible to mobilize thousands to support direct actions without relying on spokespeople and organizations to distribute and control the flow of information? Which tools were adopted to meet

these ends, and how were the tools molded to the purposes of the political actions being taken? Research on the role of social media and social networking websites in political uprisings indicates that access to the internet and mobile technologies are a democratizing agent in revolutions (Castells 2012; Juris 2008; Howard 2010). Are ICTs making a new kind of politics possible? The purpose of this study is to examine the communication infrastructure of the Occupy movement to discern which ICTs are used by activists and to what extent the adoption of new technologies affects the possibilities for social change.

This dissertation focuses on the multiple uses of ICTs across networked social movements, particularly the Occupy Wall Street movement, using a grounded theory approach (Clarke 2003; 2005) and militant ethnography (Juris 2008). In chapter 3, I discuss the method of the dissertation in more detail. The aim of this research is to empirically investigate how people use ICTs to expand the possibilities of political participation and protest, as well as to uncover the various contexts where protesters innovate and customize ICTs to enhance their usability. Mobile phones and the internet are integral to our everyday existence, but they have also become political tools for a new phase in global political struggles. Studying the effects of information and communication technologies in Islam, Howard (2010) writes, "Clearly the internet and cellphones have not on their own caused a single democratic transition, but it is safe to conclude that today, no democratic transition is possible without information technologies." Realizing the potential political uses of an existing communication

infrastructure takes a concerted effort by either an individual or group to reimagine its possibilities.

As Castells (2009) illustrates, if power is understood as a relationship of domination and counter-power taken to be a force for social change, it is possible to talk of adversaries and struggle over and through communication networks and infrastructure. This leads to a series of techno-political questions: What are the means and method of communication within a society at a given time? Who owns the communication infrastructure? Moreover, how is it distributed amongst the population? In chapter 2, I outline how academic scholarship in communication studies developed as a way to critique the expanding role of ICTs in everyday life. Specifically, I show how the widespread adoption of the internet has affected not just the way people protest, but also the operations of the global economy, how goods and services are delivered, and the ways that human labor is digitized. The incorporation of the internet into the practices of everyday life, especially with mobile phones and WiFi laptops, allows many to be connected to the internet from almost anywhere. As ubiquitous computing spreads across the global, it changes the possibilities for the organization of protest, the diffusion of tactics, and the means of participation.

In my dissertation, I describe the global topography of the Occupy

Movement's use of ICTs from June 2011-November 2012. Mapping the

communication infrastructure used by activists illustrates how the values, norms, and
ethical commitments of protesters are bound up with the choice and deployment of
technologies. Because the Occupy Movement straddles both corporate-owned and free

communication technologies, this study reveals how activists navigate and standardize information across different networking platforms. While many studies have focused on analysis of big data produced from the use of social media, few studies can identify the ways that activists conceptualize how social media works and how users subvert its intended services (Lotan et al. 2010; Segerberg & Bennett 2011; Theocharis 2012; Juris 2012; Thorson and Driscoll et al. 2013). My study will show that there is no such thing as small data. An ethnographically and historically dense account of protesters' practices demonstrates why information appears on some platforms and not on others. Critically, Thorson and Driscoll et al. (2013) find only 13.3% of Occupy-related content overlaps between the social media sites YouTube and Twitter. This suggests the need to parse different social media platforms into discrete sites of observation to find out how they are utilized before analyzing how content is shared across them. My study addresses this concern directly by mapping the engagement of protesters with ICTs over time. Specifically, I show that the medium used to communicate limits the kinds of interactions and the possibilities for taking action. This history of the Occupy Movement shows how protesters, harnessing multiple online platforms for different purposes, are able to coordinate action with those in the streets in order to meet the goals of their project.

Additionally, I explore the ways that activists invent and systematize communication protocols, as well as enforce their own boundaries. In some instances, software is purposively developed that incorporates horizontal decision making procedures, such as participant polling features, while in other circumstances, users

must make-do with what is provided by platforms already in place, like Facebook, Twitter, and YouTube. The decentralized structure of the Occupy movement raises a serious challenge for judging the validity and impact of different statements and initiatives not just for researchers, but also for members of the movement. As a result, studying how information flows and becomes legitimated through communication infrastructure also reveals hidden hierarchies of knowledge and how they are maintained. According to Lampland and Star (2009), because strategic choices are made during the course of building infrastructure, including struggles over what knowledge to include and what to leave out, analyzing it as a process reveals "how knowledge is built, constrained, and preserved" (p.18). In the case of the Occupy movement, discerning which knowledge is legitimate and what information has been verified is accomplished by following the flow of information across networks of actors who make decisions about what information is worth sharing.

While there will be hundreds of articles and books published on Occupy Wall

Street in the coming years, not many researchers have been in a position to gather data
on what is happening inside the distributed online and offline infrastructure that
connects this movement. Through action research, I have been following and
participating in the development of InterOccupy.net since its inception. InterOccupy is
a network of activists formed during the height of the encampments in October 2011.
By studying how InterOccupy uses participatory design to develop its distributed
communication infrastructure, it also becomes possible to chart how the values and
principles of the Occupy movement get coded directly into the system's design.

Through my participation in this group I have come to know the volunteers and political leanings, which allows me to grasp how their political schemas complement and sometimes conflict with each other. As a result, I am able to ascertain how these political commitments determine the format of meetings and direction of agendas, while also how changes over time in personnel and technology have improved how the Occupy movement communicates with itself and to the broader public. In an unpredictable turn of events, InterOccupy along with OWS protesters responded to the devastation in the wake of Hurricane Sandy by scaling their tools, skills, and knowledge into the network-wide project called Occupy Sandy. Occupy Sandy were able to raise over \$1.9 million dollars and mobilized 50K volunteers to respond to the ecological crisis.

InterOccupy leveraged different ICTs and straddled communication infrastructures already in place, specifically the networking tools provided by Maestro Conference Calling, Google (shared documents, email groups, and cloud storage), Twitter, and Facebook. At the same time, protesters built and maintained an open source web platform to coordinate ideas and disseminate information about direct actions. Critical to understanding how InterOccupy took up the challenge of networking the Occupy Movement is addressing why the phone and conference calls became central to their operations. In chapter 4, I review how early telephone operators employed a variety of methods for managing conversations across "party lines," where one phone line was shared among the community. I also highlight how conference calls were integral to the organization of "phone phreaks," a

geographically distributed group who studied the vast infrastructure of the telephone network. This chapter also serves as a primer on the InterOccupy project and justifies why the telephone became an integral component of the Occupy Movement's infrastructure.

Beginning in July 2011, I collected data about the kinds of ICTs protesters were using to talk to one another in order to build a movement. According to Juris (2004) and Castells (2011: 55), networked social movements use the network-making capacity of the internet in four ways: "(1) building horizontal ties and connections among diverse, autonomous elements; (2) the free and open circulation of information; (3) collaboration through decentralized coordination and directly democratic decision-making; and (4) self-directed or self-managed networking" (Juris 2004: 342).

Significantly, it is not that these movements are disorganized because they are decentralized, but rather their form mimics the communication style of the internet, where action is coordinated openly across multiple platforms. This openness allows more information to flow further across multiple networks, but also distributes power unevenly as those with more connections hold more communication power (Juris 2004: 352).

Power is multiple for Castells (2009), who defines power as "the relational capacity that enables a social actor to influence asymmetrically the decisions of other social actor(s) in ways that favor the empowered actor's will, interests, and values" (p. 10). Power that dominates and coerces is the province of institutions. In the network society, a variety of actors who struggle against institutional power can harness

communication power, which is the power to define the situation on one's own terms.

Communication power relies heavily on mass self-communication, Castells (2009)

writes,

It is mass communication because it can potentially reach a global audience, as in the position of a video on YouTube, a blog with RSS links to a number of web sources, or a message to a massive e-mail list. At the same time, it is self-communication because the production of the message is self-generated, the definition of the potential receiver(s) is self-directed, and the retrieval of specific messages or content from the World Wide Web and electronic networks is self-selected (p.55).

While transmitting messages requires a certain degree of technological skill, it also requires access to platforms and networks that can transmit the content. Networked social movements are increasingly gaining agility in mass self-communication in order to establish communication power. I return to these themes in the next chapter.

Because of the myriad places to access information about the Occupy movement, this form of networked communication is best described as rhizomatic, wherein multiple channels are used to strengthen networked connections that spread ideas from one group to another (Deleuze and Guattari 1980; Juris 2008; Castells 2012; Terranova and Donovan 2013). A rhizome is a sprawling mass of roots that grows horizontally underground, such as ginger. In contrast to other plants, rhizomes contain no center stalk and reproduce by breaking off nodes and replanting them in other spaces. Similar to well entrenched infrastructures, they grow below ground and rarely surface, so they remain hidden for most of their life. Importantly, the metaphor of the rhizome emphasizes that growth is organic and its shape depends on the surrounding conditions.

Additionally, I use the metaphor to root 'cyberspace' in the terrain of protest. Many protesters carry the internet in their pockets, which means their networks are available to them in the streets, in their homes, at their workplaces, and everywhere they go. The rhizomatic form of online communication effectively makes it impossible to stop the spread of information from becoming publicly available unless specific sites elect to block certain content or the entire internet is shut down. Information redundancy is due in large part to the overlapping, but not overlaying, networks of networks across platforms. While it is not guaranteed that the same information will show up on every platform, by staying in touch with each other across many spaces, protesters ensure a rather stable information milieu. The rhizomatic communication model used by networked social movements includes the simultaneous use of email groups, social networking sites, SMS text messaging groups, conference calling, and physical space to foster the circulation of information from many to many.

Because search engines rely on algorithms to find and organize locations of content, algorithms cull text-based tags or keywords embedded in the content. From there, returns are weighted and sorted into rankings, which dictate what is most relevant to the search and how to display those results. Relevancy is different across platforms, physical locations, and dates. Google's "page rank" algorithm places a significant weight on the number of times a website or piece of content is linked to other sites, which is then showed in a list. Twitter displays returns chronologically. Primarily used to find people, Facebook's search engine returns text found in people's names first, then in the titles of pages, groups, and events.

For example in October 2011, searching "Occupy Los Angeles" on Google returned OccupyWallSt.org first alongside Occupy LA's Facebook page as well as some Twitter accounts (@OWSLosAngeles and @OccupyLA). Months later, the domain OccupyLosAngeles.org was the first page returned in Google because it had gained notoriety by obtaining links in blogs, Facebook, and Twitter posts. On Facebook, Occupy LA protesters changed their middle name to "OccupyLosAngeles," so that they could more easily locate one another. This is not "hacking" in the sense that code was changed, but rather users remixed the intended use of the search engine. Searching for Occupy LA on Twitter yielded not only recent posts from individuals, but also the accounts of those who used the phrase in their profiles. Over time, protesters learned many of the limits of these platforms and stylized communications accordingly.

Keywords, such as #OccupyWallStreet and #OccupySandy, allowed networks to flourish as information about the movement was queried across multiple online platforms that return different forms of information. Thus, keywords are the constitutive thread that ties these platforms together and allows protesters to query information as well as find each other. I argue that this rhizomatic networked structure, then, becomes a model for carrying out direct actions themselves in a coordinated and redundant fashion, which I call distributed direct action. Moreover, its maturation relies on cultivation. In chapters 5, 6, and 7, I detail the history of InterOccupy to show how the spaces of protest contain within them a set of communication protocols. When these spaces change or become destabilized, the

structure and process of communication must adapt. In chapter 8, I describe how InterOccupy incorporated all of the available tools, skills, and techniques learned from previous actions to launch the Occupy Sandy initiative.

Literature Review

This dissertation bridges the literatures on social movements with science and technology studies illustrating how networked social movements rely on readily available social networking ICTs to mobilize, while also developing new technologies in line with their principles of maintaining public and open space. The ramifications of this study go beyond the description of the Occupy movement and its use of ICTs though. While this dissertation makes a significant contribution to the qualitative study of new media, digital ethnography, and communication infrastructure design, it makes a practical and theoretical impact on the study of the organization of social movements and STS literature. In this dissertation, I bridge research on the history of social movements, the sociology of social movements, with the fields of human computer interaction, information management, and ubiquitous computing studies in order to illustrate how values, norms, ethics, resources, and knowledge matter in the design choices of makers, the innovative capacities of users, and the social effects of technological design.

This research is also an intervention into social movements mediated by technology and will be made accessible (both data and findings) to the general public by means of a website. Those in the public who wish to design a social media

campaign or direct action around a particular tactic or political struggle can look to my research as a how-to guide for linking together existing ICTs and incorporating new ones. As an action research project, it is informed by participants who are inventing new forms of communication and reformatting older technologies, all in an effort to create global social change. In some instances, their ideas are bigger than their resources, but it may only be a matter of time before the two coincide. Moreover, this study explains the relationship of citizens to technological innovation and how new forms of political participation are made possible by the everyday use and modification of ICTs, a core objective of STS scholarship.

Infrastructure Studies

Science and technology scholars turned to studying infrastructures as a way to explain how the built environment affects, and is affected by, the social, economic, and political dimensions of everyday life. For example, Hughes (1983) studied the history of electrical power grids as a nation-building project. Bijker et al. (1987) turned to studying the sociology of technology to provide a space for analysis of not just the social aspects of technology, or technology in use, but also its design and content (p.4). As this area of analysis developed, Star and Ruhleder (1994; 1996) took up the task of looking at infrastructures as systems built to carry information. Star and Ruhleder (1996) define infrastructure as a paradoxical product and process that arises when a project has a need for continuity and standards; it involves linking

technologies, concepts, procedures, and people together so that a project can be accomplished.

As Star (1999) illustrates, infrastructure seems obvious, static, and rather boring, but investigating the development and use of infrastructure reveals very dramatic stories rife with human and technological tensions. My research tells the story of social change embedded in the communication infrastructure of the Occupy movement by investigating ICTs borrowed, modified, and/or built by networks of protesters. Critically important to the study of infrastructure is a description of the process and context of development and transformations in system design. Star and Ruhleder note that infrastructure is not just a question of what, but it is also a question of "when" does infrastructure happen (p. 113). When does information travel? When do users switch platforms? When do users innovate? When does infrastructure breakdown? Questions like these point the researcher to study infrastructure in action, as a series of relationships rather than simply sketch a list of components.

Star and Ruhleder (1996: 113) provide a definition of infrastructure with eight dimensions. First, infrastructure is embedded within other relations, systems, and technologies. Second, it is transparent to the user because it does not require the user to build it anew for each task. Third, because it is transparent, infrastructure is relatively invisible until it breaks down and requires repair. Fourth, infrastructure affects and is affected by the community who uses it. That is to say, infrastructure is transformed through its use, as are the relations within the community who use it to work on a project. Fifth, infrastructure embodies a set of standards and protocols for

its intended use. Sixth, infrastructure is built into an already-existing environment and is designed in accordance with prevailing standards and protocols. Seventh, the reach and scope of infrastructure is not limited to a single event or community. Eighth, infrastructure is learned as criteria of membership in a community, which can be taught to newcomers.

Further, Bowker (1994) illustrates that when dealing with infrastructures meant to circulate information, some information travels faster and further than other pieces. This suggests that the makers' values and codes of conduct are built directly into the design, where infrastructure is in a continual process of redesign in order to be more useful, more standardized, and more ethical. Sometimes this happens overtly, as Latour (2008) points out in the case of seatbelts that are incorporated into automobiles in order to save lives. Yet, there are more opaque examples such as the alarm that sounds when you do not engage your seatbelt. This alarm becomes so annoying after a few minutes that the driver either wears the belt or creates a work-around like harnessing it behind their back. While this is a very banal example, it makes the point clearly that researchers studying the ethics of design should not only look at the stated purpose of a product, but also look for aspects of design that do not aid the user in the intended action. In fact, a seat belt is not necessary to drive a car and an alarm can be distracting while driving. However, both are incorporated as ethical concerns transformed into technological developments. Thinking about the values of the designer is important for studying networked social movements, who often face a

contradiction when using technology developed by corporations who seek profits over social justice.

When addressing the intersection of ICTs and communication infrastructure, mobility forms the core of this project. The cellphone, itself, provides not just a conduit between people and information; it is a bridge allowing users to crisscross new borders and form relationships across widely distributed locations. Like physical bridges, mobile phones serve an enormously important, yet easily overlooked purpose. Usually infrastructures are only recognized as essential when they break or do not perform to our expectations (Star 1999). However, unlike the physical infrastructure of roads and bridges, wireless internet, software applications, and mobile phones are much more dynamic and modifiable (Coleman 2011). STS scholars in Italy are working on a theory of technologically dense environments and ubiquitous computing, where access to computers and the internet is transforming all spheres of human activity (Pellegrino 2007; Bruni 2005). When analyzing technologically dense environments, the researcher seeks out the architecture that makes sociotechnical interaction possible and queries the characteristics of the groups formed during that moment, their values and motivations for participating, while also remaining attuned to the arrangement of people, ethics, and artifacts during the process. Bruni (2005) argues that infrastructure orders both people and things in knowledge-based environments, but hierarchies tend to be more flat in technologically dense environments because of the experience needed to understand the infrastructure itself. For example, doctors may yield to the knowledge of nurses when using a particular

piece of equipment, while nurses may cede their status to administrative help when filling out forms. The flattening of hierarchies also allows for decision-making to become a shared task.

In terms of the technological dense environment created by the widespread usage of mobile phones, these devices stich together numerous platforms for communication while allowing the user to roam extensively. Software applications, like Facebook and Twitter, are used in radically different ways across and within various communities. While most individuals use these applications to chat with friends, plan parties, and share media of interest to them, some users see possibilities to create new social and informational milieus. For instance, Twitter is an online social networking platform that allows members to post short messages. These messages, called "tweets," are sortable when members use hashtags (#) to denote searchable terms. For example, President Obama uses Twitter to promote his policies and uses tags such as "#Forward" and "#Hope," while some Egyptians use Twitter to amplify stories of protest not covered by the media by tagging the date and location of events, #J18 or #Tahrir.

Knowledge of how hashtags work allows users to build an "ad hoc public," loosely connected individuals who share the same technological and informational space (Bruns and Burgess 2011). Ad hoc publics may materialize in physical locations in order to hold a protest or they may only exist in that technological environment. While the infrastructure of Twitter endures, ad hoc publics exist and dissolve at the will of the users. Using these platforms routinely for different purposes, the user grows

accustomed to the limits and also to imagine new uses. This routine practice permits organizing without organizations, as Shirky (2008) describes, "Communications tools don't get socially interesting until they get technologically boring" (p.105). That is to say, that it is only when an infrastructure becomes habit, that users are comfortable reimagining its possibilities.

While mobile ICTs are powerful tools for connecting groups, I argue throughout this dissertation that the limits of place still matter greatly for coordinating across groups. Collaboration on projects involve computer science and information systems design is best accomplished through face-to-face or shared workplaces (Donovan and Baker 2011; Myneni et al. 2008). Those who work in office spaces or laboratories often have to make do with many restrictions on space. I extend these insights to networked social movements to illustrate how a particular set of communications infrastructure supported work within the camps, which was heavily tied to capacity of the space to support interaction. Following the raids on camps, a new set of components were layered on to the already existing infrastructure in order to support better connections between protesters who, with limited space, felt disconnected from each other.

A virtual organization developed over time, InterOccupy, to facilitate communication and encourage collaboration across large geographical distances.

Organizing virtually, rather than within a specific locale, opened the possibility for new tactics to occur. Virtual organizations, also associated with large-scale scientific projects, cyberinfrastructure and e-Science, are made possible by the network-making

capacity of the internet to bring shared resources, ideas, concepts, people and information to support collaboration on a project (Mowshowitz 1997). Those working on a project as a virtual organisation may never meet one another due to geographic distribution. As a result, they must remain attended to the role infrastructure plays in organizing their group, especially when considering which components are necessary to complete a task.

During the course of this study, I apply Bowker and Star's (1999) method of "infrastructural inversion," where the researcher explicitly examines changes in infrastructure in order to center the analysis on the affordances and limits of a technology to crack open the political possibilities of what appears to be ready-made and static aspects of the communication milieu. My study illustrates that academics are not the only ones performing "infrastructural inversion," but also protesters use the same technique to subvert the hierarchy of formal organizations to remain flexible when attending the needs of communities of activists. By showing how communication infrastructure is built and leveraged across multiple platforms, I describe how activists strategize and modify these ready-mades to suit their needs and meet their goals.

Because this dissertation foregrounds infrastructure as its core unit of analysis, it is imperative to recognize that this research is not just about technology and information, but is also about the people and concepts that they tether together (Bowker 1994). As Star and Ruhleder (1996) point out, one aspect of infrastructure that might be a support for one group can be an obstacle for another. Therefore, by

studying how social change develops through the standardization of communication tools and protocols, this research contributes to scholarship on infrastructure studies and the possibilities for democratization offered by emerging technologies. This is not to suggest that more communication channels is synonymous with greater democracy, but rather to call attention to groups using multiple platforms with a particular commitment to the ethic of democratic decision-making.

When networked social movements communicate across a diverse set of platforms, they not only reveal their structure, but also their values and norms. I argue that when a single communication platform used by the Occupy Movement failed to coordinate action, such as personal email, many other ICTs were available. Protesters could easily switch channels to another flow of information, either online or offline. Moving between platforms, though, did not mean the networks mirrored one another. Rather, the networks on each platform overlapped, but there were significantly differences in users and the kinds of information shared in each place. The flexibility of infrastructure in a networked social movement is integral to solving communication breakdowns. Furthermore, in this instance, the multitude of platforms for communication used by the Occupy Movement reflected its rhizomatic structure and the value the movement placed on horizontal participatory democracy. All of this coordination depends on the protester's ability to wield keywords effectively between platforms and to share this information through online and offline networks. As a primer, I have listed all the technological components of communication infrastructure that supported participation in the Occupy Movement.

Table 1.1- Components of Communication Infrastructure

Components of Communication Infrastructure Components of Communication Infrastructure for Networked Social			
•			
	Movements		
	No Internet Required	Internet Access Required	
•	Physical Meeting Spaces O Public Parks	Movement Specific Websites Occupy WellSt are (class known as	
		OccupyWallSt.org (also known as	
	Art spacesHacker spaces	Storg) O Wearethe99percent.tumblr.com	
	**	MICCA	
	UniversitiesCafes, food courts, and	O	
	restaurants	OccupyTogether.orgOccupy_insert keywordorg sites	
	Union halls	o Interoccupy.net	
	Chirches	o Occupy.com	
	o Parking lots	 Occupy.net / OccupyWallstreet.Net 	
	Office space	Live Broadcast Media	
	People's homes	O YouTube.com	
	In the Streets	UStream.tv	
	Hardware infrastructure	Livestream.com	
	 Mobile phones 	o Bambuser.com	
	Computers/tablets	Online discussion sites	
	 Wi-Fi routers/ Hot Spots 	Meetup.com	
	o Servers	o Reddit.com	
	 Hard drives 	 Internet Relay Chatrooms 	
	 Cameras 	 Online petition sites 	
	 Electricity: plugs, 	Social Media	
	batteries, solar power or	o Facebook (Pages, Groups, Events, and	
	gas generators	Personal Profiles)	
	 Telephones and Cellular 	Twitter.com (Personal accounts and)	
	Phones	accounts administrated by groups)	
•	Print Media	o Flickr.com	
	 Adbusters Magazine 	o Tumblr.com	
	 Occupy Newspapers 	 YouTube.com 	
	 Signs (made from trash 	 Personal email 	
	and donated items, t-	 Personal blogs 	
	shirts, stickers, patches)	• Chat services (Google Hangout, mumble,	
	 Pamphlets and fliers 	Skype)	
	 Business Cards 	• Email lists (RiseUp.net and Google Groups)	
	o Banners	Shareable online documents (Google Docs and	
•	Shortwave radio	EtherPad)	
•	P.O. Box or personal address for	 Online donation sites (WePay, PayPal) 	
	mail	• Virtual Maps (Ushahidi, Google Fusion Tables)	
•	Bank account at local branch	Memes (Graphics shared online)	
•	Telephone calls	Police Scanners	
•	SMS messages and text loops	 Voice Over Internet Protocol (VOIP) 	
•	Mainstream media (local and	Needs lists	
	national news: television, radio)	o posted on websites and social media	
•	General Assembly or Spokes	 Amazon wish list/ wedding registry 	
	Council (structure and process for	Podcasting or internet radio broadcast	
	decision-making)	 Mainstream media (online content) 	
•	People's Mic (Chants, Slogans)		
Components that can used with or without internet access			
Conference calls (Maestro Conference, FreeConferenceCall.com, GoToMeeting.com)			

While not every group affiliated with the Occupy Movement used all of these components, every group used some combination of them in order to meet their communication needs.

Social Movements: Technology, Tactics, and Organizational Forms

Recent scholarship in communication, anthropology, and sociology addresses the political and social uses of ICTs within social movements. This research shows how movements use ICTs to find one another, coordinate action, and to create a narrative about themselves by making their own media (Coleman 2010; Coleman 2012; Coleman 2014; Castells 2012; Juris 2008; Earl and Kimport 2008; and Earl et al. 2010). As theories of the network society gain prominence among theorists of social movements and the internet, "networked social movements" bear a family resemblance to the social movements of old, but leave in their wake a range of new phenomenon including massive participant-generated digital archives of events, an insistence on pro-longed decentralized organizing, and complex leaderless rule (Juris 2004; 2007; Urry 2005; Castells 2004; 2007; 2012; Terranova and Donovan 2013). This has led to a need to develop methods for researching these movements as they proliferate.

According to Earl et al. (2004), scholars of movements depend heavily on newspaper accounts of events to describe movements. With the abundance of online media, this reliance is no longer necessary given the astounding array of media produced by movements themselves. It is not that media is a new terrain of struggle as

movements have always attempted to sway media accounts. Rather for protesters, access to the tools to create and distribute media quickly across large audiences gives rise to a different mechanism for organizing movements. For researchers, it provides archival materials for analysis. In many ways, charting the infrastructure of a networked social movement provides a mosaic where the researcher can piece together the resources available to a movement in different places and times as well as provides a window into how the movement describes itself. It is a mistake, though, to describe the technological dimensions of the infrastructure without people attention to the people using it.

Unfortunately, overstated claims about the effect and significance of ICTs in times of social protest can lead to confusion about the importance and role of ICTS in fomenting social change. For example, in a TED talk on the role of technology in social movements, Tufekci stated of the Occupy Movement, "It started with a single email from a magazine, Adbusters, to 90,000 subscribers in its list. About two months after that first email, there were in the United States 600 ongoing occupations and protests." As the history of OWS in this introduction shows, technology alone did not make OWS diffuse across the globe. People using technology to form networks, while also organizing in other ways is what made the initial call to action successful. What helped spread OWS across the US was the extensive sharing of a video showing NYPD pepper-spraying young women, which brought mainstream media attention to the emerging movement. The arrests of 700 on the Brooklyn Bridge a week later

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²³ For the full video and transcript, see:

https://www.ted.com/talks/zeynep_tufekci_how_the_internet_has_made_social_change_easy_to_organize_hard_to_win/transcript?language=en Last accessed 5/20/2015

added many more nodes to the growing rhizome. My point is that OWS did not start with a "single email," but rather it is the story of networks coming together through a tremendously complex series of events and technologies. Statements that seek to reduce this complexity to "one email" bury the actions of people in favor of highlighting the power of technology to create social change. ICTs do not cause social protest, but their use facilitates a range of tactics that would not be possible otherwise (Howard 2010).

It is not just that overemphasizing the role and importance of technology can lead to misrepresentations by researchers. For observers of the Occupy movement, the disappearance of camps signaled the death of the movement. While the networks of the movement persisted both online and off, the tactic of occupation was its lifeblood. Skocpol stated that the death of the movement stemmed from a lack of resourcefulness, "Occupy got bogged down in tent cities. In social movement literature we'd argue that there was a failure to engage in tactical innovation at a crucial time" (Skocpol as quoted in Francescani 2012). The seizure of public space was a critical aspect of the movement, but there were many other tactics employed by protesters prior to and just after the raids. Critically, without attention to the communication infrastructure, though, many had to rely on media accounts of the movement's activities. This problem is compounded by the structure of networked social movements where the emphasis on decentralized decision-making coupled with the disparagement representatives made it difficult for many to observe the movement when it was no longer in public space.

In order to study social movements according to their tactics, McAdam (1983) outlines three concepts that emphasize the relationship between movements and counter-movements: tactical innovation, tactical adaptation, and tactical interaction. While tactical innovation refers to "the creativity of insurgents in devising new tactical forms," tactical adaptation is "the ability of opponents to neutralize these moves through effective tactical counter" (p.736). Therefore, tactical interaction is the process through which these actions are offset, much like a chess match (p.736). If an insurgent fails to invent new tactics that keep the opponent off balance, then the opponent is able to outmaneuver them. In the case of the Occupy Movement, police eventually overwhelmed protesters and arrested thousands of participants in a crackdown coordinated by city mayors. Because the movement did not have a significant public presence following the suppression and media coverage declined, it was as a failure to innovate tactically.

Because I situate this research at the intersection of tactics and organizational forms within the InterOccupy network, my study is designed to locate and describe these tactical innovations at the time when the Occupy Movement was least visible to the public and mainstream media. As Welsh (2001) has pointed out, the disappearance of a movement from the press or public eye is part of the cycle of protest, which is typically characterized by times of inaction. Taylor (1989) describes that social movements may enter periods of abeyance, which are "essentially a holding pattern of a group which continues to mount some type of challenge even in a non-receptive political environment" (772). For Taylor, the abeyance structure,

undergirded by pre-existing networks, shapes the goals, tactics, and collective identity of the movement during hibernation. For networked social movements, mobilization is more like a swarm and building infrastructure is akin to working in a hive.

I detail this perceived period of inaction by making visible (and participating) in the mundane work of movement building, including writing protocols for communication and coordination, archiving bureaucratic materials such as meeting notes, as well as facilitating conference calls, and in person meetings through the InterOccupy network. In doing so, I bridge the social movement scholars concerns regarding how movements deal with state oppression alongside the interests of infrastructure researchers who seek to surface invisible work (Earl and Soule 2006; Early 2006; Starr Strauss 1999; Suchman 1995). Detailing the infrastructure used by protesters as reactive and adaptive to both internal and external constraints contributes to the emerging paradigm for studying these networked movements.

While the camps were an important event in the trajectory of the movement, I argue that movements are more than just a series of tactics. Rather to mature beyond tactics, they require a robust organizational structure in order to develop a narrative. By looking at how the Occupy movement communicates, my study goes beyond critiques that the movement simply failed to innovate by showing how some protesters turned their attention to internal organization for building communication channels that would allow tactical innovation to occur on a much broader scale at a later time. As Karasti, Baker, and Millerand (2010) point out, building new infrastructures not only takes significant time to develop; they are also projects in continuous design that

remain flexible to changing conditions. Therefore, studying InterOccupy shows how protesters transformed their aims from urban camps to network building, but the movement was seen as a failure to innovate due to the lag in "infrastructure time" (p. 381).

Because the Occupy Movement did not aim to establish a well-defined organizational framework, many scholars found it difficult to describe and study within traditional sociological paradigms. Resource mobilization theory (RMT) and political process theory (PPT) developed in reaction to psycho-social theories of collective action. Social psychological theories of movements insisted grievances, shared discontent, and depravation lay at the root of movements (Gurr 1970; Turner and Killian1972; Smelser 1963). Inspired by Olson's *The Logic of Collective Action*, RMT and PPT researchers believed that participation in social movements was a normal psychological process and thus needed to be explained based on the objective social conditions common to a population, not vague concepts such common ideology and beliefs (Zald and McCarthy 2002). Additionally, these approaches sought to explain the roles of organizations and institutions in bringing about social change (McCarthy and Zald 1977; Tilly 1978; McAdam 1982).

Disagreement persists with these two approaches in relationship to the weight given to different factors. RMT studies emphasize the role of professional organizations, access to the media, the political elite, and monetary as well as other resources in shaping the outcome of a social movement. In contrast, PPT researchers call attention to the political and social context that limits the opportunities and tactics

available to social movements at a given time (McCarthy and Zald 1977; 2006; Tilly 1995). Because they focused on different variables, RMT and PPT scholars described different relationships between social movements, organizations, and the state. For example, differences in attention to particular variables can lead to overstating the roles of different actors. It also reveals the researchers orientation to their subject. When describing the gay rights and women's rights movements, RMT scholars suggested that the emergence of social movement organizations provided the capacity necessary to organize as a full-time as representatives of a marginalized group (Jenkins and Eckert 1986). In contrast, PPT opponents argued that this type of organizing was a form of social control and a constraint on popular protest (Jenkins and Eckert 1986). The way the theory operates upon the historical record accounts for these vastly different descriptions of outcomes.

RMT proponents, McCarty and Zald (1977), distinguished between a social movement as broad call for social change and a social movement organization, which is "a complex, or formal, organization which identifies its goals with the preferences of a social movement or a countermovement and attempts to implement those goals" (p. 2118). Therefore, a SMO is a funded entity that is contending not only for attention from politicians, the media, and the population, but they are also in contention for resources with similar organizations within social movement industry, or in other words, within a capitalist economy. To study movements in this way, RMT focused on the networks of elites in bringing about social change. Therefore, from the perspective of this RMT, LGBT groups who coordinated as a professional organization were able

to make political gains in policy (Jenkins and Eckert 1986). From the RMT perspective, the standpoint of professional groups, especially when explaining goals of identity-groups, provided the best evidence of why reforms took place.

Critiques of SMOs studies argue that scholars have focused too narrowly on literature designed by the organizations and miss a range of materials pertinent to studying a movement. Polletta (1998) writes that studying only SMOs frames "neglects the discursive processes that precede the formation of movement organizations or that take place outside their auspices" (p. 138). Tilly (1978) showed how the structure of political opportunities explained why some strategies and tactics were taken up at a given time, while others were not even when the needed resources were available. Madam (1982) argued that access to material resources matters little if the political context is so limited that mobilization is not possible. He went on to say that, elites are not part of insurgent social movements because they strengthen the status quo rather than challenge it (McAdam 1982: 25-26). Martin (2013) contests the idea that elites are outside social movements by showing how "rich people's movements" are effective because they use their abundant resources to enroll allies strategically in order to make favorable changes to policy.

In contrast, PPT research downplayed the relationships between social movement organizations in favor of describing the structure of the political system and its capacity to grant concessions or repress movements (McAdam et al. 1996). To do this, PPT analyzes tactics as "repertories of contention" to show how movements engaged with opponents as well as learned from one another (Tilly 1995). Tilly (1995)

described how changes in the political opportunity structure, such as economic crises, demographic shifts, and the democratization of political institutions in Britain influenced the organizational form, chosen tactics, and desired goals of contending groups. Thus, PPT scholars studying the LGBT movement saw that the concessions given by the state to professional groups served to buffer the state from the more radical demands of LGBT insurgent groups (Jenkins and Eckert 1986). Critics of PPT note that scholars using this model focus too much on the structure of the state, which produces a ridged structural bias in categorizing what counts as political action (Goodwin and Jasper 2003: Pp. 6-7). Yet, for PPT scholars, the structure of state politics determined much about the tactics protesters would use to make gains.

McAdam (1994) worried that these paradigms have limited American scholars from recognizing the cultural effects of movements in America. He writes "the dominance, within the United States, of the "resource mobilization" and "political process" perspectives has privileged the political, organizational, and network/ structural aspects of social movements, while giving the more cultural or ideational dimensions of collective action short shrift" (p. 36). This, however, was not the case in Europe as scholars of new social movements (NSM) routinely used culture to explain variances across different mobilizations. Similar to the emergence of American paradigm reacting to psycho-social theories of collective action, the early theorists of new social movements were perplexed by Marxist theorists inability to fully assess anti-war and student movements as different from previous movements that sought

redress of economic grievances (Cohen 1985; Melucci 1980; 1981; 1985, Touraine 1971a; 1971b; 1981; Castells 1976; 1977; 1978; 1983:296-298).

Studies of NSM in Europe were different from American scholarship not only because of the case studies under review, but also because the theoretical orientation differed particularly in conceptualizing the role of the state and its relationship to culture. Offe (1985) claimed that the new social movements popular in Europe in the 1970s were a result of the declining status and resources of civil society that could no longer rely on the state for its security. In effect, arts and culture became politicized through regulation and funding by the state, but new social movements sought to free themselves from state control (p. 820). He argues, that the politics of new social movements "seeks to politicize the institutions of civil society in ways that are not constrained by the channels of representative-bureaucratic political institutions, and thereby to reconstitute a civil society that is no longer dependent upon ever more regulation, control, and intervention" (p. 820). Here then, NSM desired transformations within culture and the norms of society, but did not see traditional politics or interactions with the state as the best avenue to accomplish these changes.

American scholars were largely perplexed by similar questions in relationship to identity-based movements that sought to change culture and improve living conditions. American scholars sought to understand the cultural and collective identity dimensions of movements by analyzing "frames," which are "the interpretive packages that activists develop to mobilize potential adherents and constituents" (Polletta and Jaspers 2002: 291). At the heart of this paradigm shift was not just a

change in attention to factors useful for study, but also recognition of change within the organizational structure of NSMs themselves, which covered a wide range of issues including peace movements, anti-war movements, racial justice movements, student movements, and animal rights movements.

Johnston et al. (1994) found that NSMs had a broad base of participants from many different class and ethnic backgrounds, where ideas and values are plural. Yet, NSMs do show coherency when it comes to enlarging the decision-making capacity of the public (p. 6). This leads to the establishment of a new, but weak, collective identity shared by those who participate. The confirmation of the new identity enacted through increased participation in the movement, but the legitimacy of the movement depends heavily on a crisis to mobilize (p. 8). Lastly, NSMs are not bureaucratic organizations, but tend to be "segmented, diffuse, and decentralized" (p. 9). As a result, local groups make decisions based on collective debate, which gives them a high degree of autonomy (p. 9). Johnson et al. (2009) conclude that this localization of decisionmaking and respect for autonomy limit the NSM from organizing regionally or nationally. In this sense, NSMs rely heavily on expressions of identity to wed participation to cultural change. In order to study movements organized in this way, American scholars turned to framing as both a method of research and theory of action. Critics of new social movements suggest that proponents have a difficult time proving that there are new things happening as many movements include both political and social dimensions to their call for change (Calhoun 1993).

Framing began as theory of the organization of experience elaborated by Goffman (1974), where he sought to show how people make sense of everyday activities. Social movement researchers used this theory to provide explanations of collective action when assessing the motivation for joining a social movement was unclear. According to Snow et al. (1986), frames render "events or occurrences meaningful [...and] function to organize experience and guide action" (p. 464). SMOs construct frames in such a way as to resonate with the experiences of others for the purpose of gaining sympathy, understanding, support, and to garner allies (Pp. 464-465). Frames can also help one organization delegitimize the claims of another (Polletta 1998: 421). According to social movement theorists, frames are constituted discursively and can be studied through many different artefacts including pamphlets, leaflets, signs, slogans, literature made by organizations, speeches given by leaders, media portrayals of the movement, an articulated set of demands, objectives, legal cases, obituaries, or mission statements (Snow et al. 1986; Benford 1997; Tarrow 1992; Cress and Snow 2000; Polletta 1998).

In each of these theoretical models, the methods of communication used by protesters to coordinate action are not significant concerns. For RMT, only resources restrict the availability of communication infrastructure. Rather than turn to study the relationship of hard infrastructure to social infrastructure, McCarthy (1987) theorized infrastructure as "thick" or "thin" based on the density of social ties between SMOs and their ability to share resources. For example, McCarthy and Zald (2006) write, "If a movement effort endures beyond a single event and links several networks of

adherents and activists, a more or less formal organization (at a minimum a mailing list, a name, and a set of controllers of the mailing list and attendant resources) is likely to develop" (p. 537). A mailing list is a particular kind of resource that is valuable to an organization, but is that mailing list the only way of communicating across a movement? What other methods are available to mobilize adherents? Thinking about communication infrastructure as both a resource and a mechanism for organization suggests that whomever is in control of the mailing list has a high degree of power over the movement. Yet, if there are other ways to send messages across the movement, then perhaps the mailing list is just one tool among many, which indicates that organization holds relatively little power.

In reference to PPT, attention to the communication between movements and the state through the analysis of social movement's tactics and political outcomes serves reduces the complexity of information circulating through the communication milieu. For example, prior to the internet, institutionalized communication between movements and politicians was limited to a range of tactics including showing up to their chambers, petitions, letters, and phone calls. In some instances, massifying these tactics led to concessions. With the internet, these kinds of tactics are much easier to facilitate across larger populations because the cost of participation is low (Van Laer and Aelst 2010:1151). A side effect is that the sway these tactics held in the past has declined in direct relation to the effort it takes mobilize large groups of people. In order to assess the impact of tactics on policy, it requires attention to the infrastructures that make communication and action possible.

With NSM scholars, the absence of a coordinating infrastructure for regional and national collaboration was a consequence of the decentralized structure and localized decision-making practices of the movements. This is not to suggest, however, that the movements were unable to capture the national stage. For example, days of action in multiple locations were coordinated through networks of friends and organizations involved in NSMs, but calls to action were physically limited by the reach of certain tools such as telephones, letters, newsletters, and fliers. Welsh (2001) showed how Anti-nuclear protests in the late 1970s- early 1980s built a distributed network of networks, which increased the density of ties between segments involved in direct action. Here, the physical space of occupations and actions provided a prop for participants to get to know one another and exchange contact information. In many ways, the limits of the components of the communication infrastructure illustrate how building capacity across locations was complex and required dedicated resources as well as time (Welsh 2001). This same problem plagued Occupy protesters in the months that followed the raids. At the same time that protesters were gaining their bearings in cities that actively suppressed assembling in space, new movement building initiatives emerged that sought to connect protesters virtually.

Lastly, framing theorists were attentive to the rhetoric of movements no matter where it surfaced, but did not critically engage how different communication tools directed and mediated content for different audiences. For example, the Student Nonviolent Coordinating Committee used their newsletter, *The Student Voice*, strategically in order to coordinate actions across local chapters as well as to promote

a unified vision of the movement for the outside public (Walmsley 2014; Murphree 2003). To produce the newsletter and to gather content, SNCC bought a printing press and employed a photography team. This ensured the content of the printed newsletter was largely under the national office's direction as well as provided materials for the mainstream media in times when coverage was low (Walmsley 2014: 293). In this sense, looking what infrastructure SNCC deemed important for messaging their cause shows a motivation to manage images and content even beyond the newsletter.

While each of these paradigms provides frameworks to study collective action, I turn to infrastructure as a way to move beyond their limits. Infrastructure is the substrate that brings people, technology, and ideas into contact with one another (Bowker et al. 2010). By studying the information infrastructure of the Occupy Movement, I am able to see how ICTs mediated, strained, and strengthened the movement during periods of mass mobilization and abeyance. Further, because the internet has significantly lowered the cost of participating and building an organization, describing competition for resources among SMOs does not accurately reflect the structure of the movement. As well given the insights of NSM, the Occupy movement more closely resembles a diffused and decentralized network rather than a social movement industry. Rather than look to the state to understand what institutional opportunities for change were available to the movement, I show how building movement infrastructure was an attempt to counter state oppression.

In this dissertation, I describe the Occupy Movement as a networked social movement to foreground the importance of the internet to organizing collective action.

For networked social movements, the question is not which communication infrastructure to use, but how to link many platforms together so that direct action can be sizable and effective. InterOccupy developed as a virtual organization with the intended goal of networking movement groups with one another. In this way, InterOccupy is a "network of networks" and acts as a stabilizing agent in a complex communication infrastructure (Melucci 1996). InterOccupy is an important case study for building on the theory of networked social movements because it was a concerted attempt to combine social networking sites' capacity to broadcast from many to many with directed point-to-point relays of information. Moreover, though the Occupy Movement was rooted in the internet, mobility and decision-making were complex puzzles that InterOccupy tried to solve.

Sociology of Science and Technology and the Study of Emerging Technologies

When limits of infrastructure are recognized, designers often set out to expand their capacities in new ways. Studying the emergence of digital technologies is a challenging task because it is difficult to predict which technologies will succeed or fail (Baym 2000; Danet 2001; Kendall 2002; Miller & Slater 2000; Pfaffenberger 1996). Implicit in the widespread adoption of new technologies are a set of users' needs to be fulfilled, but the adoption of new ICTs also augments relationships between new and existing users in unpredictable ways (Castells 1996; Hayles 1999; Negroponte 1996; Turkle 1995). Complicating the study of emerging technologies is the speed of product development that can either be rapid or slow depending on

various factors, including knowledge of the product, developers' capacity to innovate and adapt, as well as access to resources such as materials and finances.

Another prevalent obstacle includes the promise of a technology outshining its actual applications and, thus, a problem of overstating the effects of the product (Hedgecoe 2004). Proponents of the strong programme in the sociology of knowledge suggested studying failures of science and technology (Barnes, Bloor, and Henry 1996). Analyzing emerging technologies alongside the reimagining of older ones clarifies how some technological innovations that may not have met expectations in one area are successes when looked at from another perspective. That is to say, technologies can have paradoxical or unintended effects. For instance, the technology of Twitter can be used by the state and corporations to monitor protest activities. Yet for those relying on it to communicate short bursts of information, it is an indispensable messaging tool for street protests.

Moreover, emerging technologies can also be highly controversial during their development stages. Scholars of science and technology have studied the public opinion of science from many vantage points to explain why controversies arise and how they can be mitigated. Because scientific controversies stem from a range of political, cultural, and religious causes, avoiding disputes is not just a question of the public having access to open data about technologies, but it is also an ethical question of the right to live without harmful science and technologies (Rose 2006; Epstein 2007). In an effort to assuage political upheaval during the introductory phase of a new technology or scientific endeavor, some countries developed "scientific

citizenship" projects in order to elicit the community's concerns about the progress of a particular science or technology. These concerns are then incorporated into the design and/or government regulation of the science or technology (Irwin 2001). For the Occupy movement, many of the grievances against global capitalism and representative government, especially activists who seek environmental justice, stem from a perceived lack of attention to the needs of the public and the corporate takeover of institutions once held in common, like universities and government research facilities. As of late, activists engaged in internet freedom protests often take legislation and government oversight as their targets (Coleman 2012).

Applying these insights to the study of ICTs and communication infrastructure is imperative given the current context of social unrest and unprecedented group connectivity through web 2.0. Because innovation happens on the margins of utility, charting the various forms of communication alongside decisions to use or develop one tool over another also illuminates the values of the group and conditions of possibility for future development. So too, by tracing how administrators, developers, programmers, and users share content and augment the flow of information across multiple communication infrastructures, this dissertation will significantly add to the nascent literature on the sociology of science and technology studies applied to the use of technology by networked social movements. For InterOccupy and groups like them, the question is not just which technology to use, but how to make them easy to use, interoperable with other applications, and mobile so they can be used in the field of

protest. Critically, the next chapter shows how transformations in ICTs affect all sectors of society in different ways.

CHAPTER TWO

Shifting the Paradigm of Social Movements

A paradigm for networked social movements must address the changes in organizational structure, identity formation, and communication technologies of movements mediated by new ICTs. The global protests against capitalism, especially Seattle 1999, were the proving grounds for current social movements' uses of ICTs and their networking capacities. Following a large-scale protest in Spain, which utilized text messages to mobilize in 2004, some movement scholars turned to network thinking to study how SMS and email lists were modifying the possibilities for collective action (Juris 2004; 2008; Urry 2005; Polletta 2004; Castells 2004; 2007; 2012; Terranova and Donovan 2013).

As Castells (2012) writes of networked social movements, "The characteristics of communication processes between individuals engaged in the social movement determine the organization characteristics of the social movement itself: the more interaction and self-configurable communication is, the less hierarchical is the organization and the more participatory is the movement" (p. 15). The basic structure of networked movements is rhizomatic, not vertical, and reflects the nature of the communication technologies used to spread information (Juris 2008; Castells 2012; Terranova and Donovan 2013). Vertical communication networks depend on a central organization to act as the hub switching information between disparate nodes. For

example, union officers may decide that a march is needed and then spread the information to the rank and file. In a rhizomatic model, the nodes communicate directly with one another, in effect bypassing the need for centralized organizations.

In this section, I begin by discussing how communication scholars adopt interdisciplinary theories and methods to show how forms of communication shape the social organization of the means and relations of production. Just as the widespread adoption of the printing press, radio, and telephone augmented social relations, I describe how the mobile internet produces technologically dense environments (TDEs) within the network society (Bruni 2013; Bruni 2005). In TDEs, digitized information is distributed across communication networks so that action can occur at a distance from authority. Because of such changes, it is difficult to synthesize and trust information as well as control the flow of material across digital networks. A latent effect is that algorithms come to make important decisions that were once in the domain of human practice, while the vast majority of human digital laborers are relegated to tasks that are boring, routine, and hold little value. As examples, I demonstrate how critical spheres such as the stock market, commodity production, and human labor are recalibrated as more and more of our lives are moved into online spaces. I conclude by showing how protesters utilize these transformations in communication and network formation to leverage online networks and demarcate new sites of engagement with the state and corporations. It is not only that the internet revolutionized economic and social relations, but that new forms of power and control

are made possible with the advancement of Web 2.0, which marks the movement of the web from a content delivery system to one of social networking.

Critically, thinking about social movements as "networked" melds theories from anthropology, sociology, history, philosophy, political science, psychology, and computer science culminating in discipline of communication studies. Communication was born a hybrid discipline that takes into account how culture mediates and is mediated by different forms of communication. Following Hitler's rise to power in Germany in the 1940s, scholars in sociology and political philosophy were concerned with the effects of mass media and propaganda on publics (Smith, Lasswell, and Casey 1946). They asked, "if mass communication was a key component to the health of a democracy, how did media aid genocide?" Moreover in the 1940s-1950s, sociologists like Paul Lazarsfeld, called for "communications research" to become its own social science that covered not only mass media, but also journalism, advertising, language, persuasion, and more (Delia 1987: xi). By the 1970s, feminists formed research institutes and held conferences on the mutual entanglements of communication, language, and gender.²⁴

At the same time, theories of media analysis and the influence of technology on society by prominent academics, like Marshall McLuhan and Neil Postman, were read widely by the general public. McLuhan (2003; originally published in 1964), in particular, raised a controversial point: was the form of technology more important than the content it circulated? Critics charged that McLuhan's assertion that "the

²⁴ See: The Organization for the Study of Communication, Language, and Gender (established in 1972), and The Organization for Research on Women and Communication (established in 1977).

medium is the message" resulted in technological determinism. The influence of McLuhan is important because it expanded case studies of media genres. Instead of looking only at the social impact of particular pieces of film, art, and radio/television programs, researchers began investigating how form effects the reception by an audience as well as how audience expectations shape content. The effects of McLuhan's scholarship were felt decades later in communication and media studies (Greenfield, Farrar, and Beagles-Roos 1988). Importantly, the medium became a place to understand the affordances and constraints of the content; a very critical insight for thinking through the differences between internet platforms and the content they carry. In this sense, I pivot to analyzing the infrastructure of networked social movements instead of the content or frames in order to understand the affordances and constraints of organizing collective action in this way.

Throughout the 1980s and 1990s, universities renamed journalism, media, and rhetoric departments to reflect communication studies as a major. Professors of communication studies rarely hold PhDs in communication because there were few universities offering certification. Therefore, communication departments are eclectic collections of disciplines that also allow scholars to keep their disciplinary identities intact as political scientists, psychologists, sociologists, historians, anthropologists, and so on. Moreover, assembling scholars based on a subject of study like communication but not grouping by disciplinary training, their work is not bound to the same paradigmatic traditions. For sociologists turned communication scholars in particular, the effect is a confluence of assumptions between communication scholars

and sociologists on some basic precepts of society and social movements, but some sharp contrasts in approaches to studying social movements from the point of view of communication, especially contemporary networked movements.

The Network Society as an Information Milieu

In the 1990s, communication scholars turned to studies of the "network society" and the role of information in capitalist societies. This shift reflected the need for scholarship on innovations in ICTS and new media, such as mobile phones, digital recording, high definition television, personal computers, and the World Wide Web. At its most basic, the network society refers to the social organization of networks through electronic technologies including mass media and telecommunication. Of networks, Castells (2005:4) writes,

Networks throughout history had a major advantage and a major problem vis-a-vis other forms of social organization. On the one hand, they are the most adaptable and flexible organizational forms, so following very efficiently the evolutionary path of human social arrangements. On the other hand, in the past they could not master and coordinate the resources needed to accomplish a given task or fulfill a project beyond a certain size and complexity of the organization required to perform the task. Thus, in the historical record, networks were the domain of the private life, while the world of production, power, and war was occupied by large, vertical organizations, such as states, churches, armies, and corporations that could marshal vast pools of resources around the purpose defined by a central authority.

Networks are ancient models of social organization that contrast with highly specialized bureaucracies. As Weber (1946) points out, bureaucracies are efficient to a point, but they cannot quickly adapt to new conditions or accommodate individual cases. In bureaucracies the individual must bend to fit the rule, never will the rule

change to meet the individual's needs. In this sense, vertically organized institutions that rely on formal rules and hierarchies to accomplish tasks are rigid and slow to take action. In terms of social movements, Michels (1915), a political sociologist, described the iron law of oligarchy among political parties as a trade-off between size, speed, and participation in decision-making. According to Michels, a political party or social movement cannot be simultaneously fast, large, and inclusive. He also argued that diffuse organizations turn to bureaucratic rule when they become too large to fit in a single space. In effect, increased organizational complexity decreased the possibilities of democratic or horizontal decision-making. Movements of the network society use digital tools, such as web platforms and mobile applications in order to reimagine the limits of size, speed, and participation. Not only do these ICTs change the ways that decisions are made, they are key aspects of overcoming the limits of time and space.

In the network society, work is fragmented and organized through new arrangements of time and space across distributed digital networks, which coexists with agrarian and industrial configurations of time and space. Time and space in the network society are contrasted to agrarian societies, where time and space is fashioned through the life-cycle of biology, nature, localization, and contiguity. In industrial societies, the clock is a form of disciplinary time that standardizes work hours and designates the timing of everyday practices, like eating, sleeping, and leisure. Under industrialism, work is carried out within bounded spaces with strict adherence to clocks and linear work processes; bureaucratic hierarchy reigns and is codified in titles and pay scales. Castells (2009) argues that the network society functions on "timeless"

time" through the "space of flows" because digital flows of information can connect people and organizations instantaneously, asynchronously, and without the need for co-presence.

With the rise of the network society, work practices change because the distinctions between work, home, and play are difficult to discern due to the increasing reliance on ICTS in all facets of life. With the spread of computer networks, capitalist societies are characterized by a technological paradigm of informationalism, which replaces but does not eradicate industrialism (Castells 1996). For example, why does work increasingly look like play which looks like work? An observer watching someone stare at a screen has little idea what the subject is doing. In the case of the movie producer, are they editing a movie or watching it? For a cadet, are they playing a war game or actually commanding a drone? For the academic, are they doing research or reading the newspaper? For the travel agent, are they planning a vacation for themselves or someone else? In each instance, the qualities that make up work and leisure appear the same: watching, typing, and reading. But, as Berardi (2005) asserts, the difference is mental labor that is not interchangeable between individuals. Even those who are most computer literate, like programmers, cannot sit down in front of a computer to fly a drone without training and education. In order to make sense of what the subject is doing, the observer must look for context to figure out where the action is. Later, I argue that this indiscernibility between work/ play and home/office allows activists employed in the knowledge economy to leverage the time, skills, and resources of their employer to organize movements from a distance.

In the network society, space is both virtual and physical. Castells (1999) defines the space of flows as:

the material arrangements that allow for simultaneity of social practices without territorial contiguity. It is not purely electronic space...It is made up first of all of a technological infrastructure of information systems, telecommunications, and transportation lines. The capacity and characteristics of this infrastructure and the location of its elements determine the functions of the space of flows, and its relationship to other spatial forms and processes. The space of flows is also made of networks of interaction, and the goals and task of each network configurate a different space of flows (295).

Star and Ruhleder (1996) define infrastructure as a product and process that involves technologies, concepts, and people. The tasks of a network become routine as formal and informal standards are institutionalized in order to "streamline procedures, regulate behaviors, to demand specific results, or to prevent harm" (Lampland and Star 2009: 10). It is a question of power to determine who gets to make the decisions about which procedures are adopted, picking which behaviors are good or bad, asserting which results matter, and who is harmed by the outcome. In order to assess a space of flows and investigate these questions of power, the researcher must be positioned within the infrastructure itself for a long period or else they will fail to see how networks are constituted, how they fluctuate, and how decisions are made.

For example as Aneesh (2006) explains of transnational laboring in call centers in India, workers' bodies remain bound inside national borders, while their labor flows through digital networks. In this new mode of production that operates primarily by moving and synthesizing information, labor is harnessed, manipulated, extorted, worked upon, and sold at any hour to any place within the space of flows. Here, time

is clocked according to the minutes it takes to complete a task and global time matters insofar as clients are located in other time zones. Because physical place is layered on to clock time, it is common for those working in call centers in other countries to timeshift their lifestyles to accommodate the business hours of its clients.

This example also illustrates that location as a place matters for the organization of everyday life. Places act as hubs that link flows of information as well as hold the power to manage access to those places. Thus, some places are more important than others depending on their position and function within the space of flows. In terms of grassroots struggles, place can be a determining factor in the strategy of political and social action. Critically in places where the space of flows cannot reach, state power is exercised most brutally as subjects are cut off from outside information. As in the case of Occupy Wall Street, beginning the demonstrations in New York City was critical for establishing the legitimacy of the protest because of its proximity to Wall Street itself. Yet, the recognition that Wall Street is everywhere provided the impetus to expand not just through online platforms, but also throughout the physical world. Through this expansive infrastructure, the space of flows links these different geographies together; i.e. of place, the internet, and authority.

Italian theorists of science and technology studies think of the relationship between space, technology, and authority as "technologically dense environments" (TDE), where the equipment that is required to accomplish a specific task has grown in technological and organizational complexity (Bruni and Orabona 2009). It is a

concept derived from Star's work on infrastructure and seeks to attend to the material limits of integrating new technologies into already highly computerized and standardized environments. For instance, nursing has always required numerous tools and devices to monitor patients, but the digitization of medical records and advances in monitoring machinery have rendered taking a patient's diagnostics manually nearly unthinkable, even when the practice is quick and equally reliable. Within technologically dense environments, information is shuttled across machines and networks via wires and frequencies in the form of files involving both machine and human labor, such that these records are no longer bound to the records room or even the hospital. Nursing, and by extension doctoring, occur in a technologically dense environment where the doctor no longer has to directly observe the patient to do work upon the illness. The hospital as a place is part of the apparatus of serving the patient, yet with the implementation of tele-medicine and wearable diagnostic tools, the hospital is also a space of flows for doctors to carry out their work even if the patient does not enter its doors. Again, the questions of power at the heart of infrastructure remains: who is allowed to change these procedures, whose behaviors are the target of intervention, what are the desired results, and who is affected by the differences in outcomes? Within the TDE of medicine, the patient is transfigured into diagnostic units of digitized and databased information so that action can occur at a distance. The effect of digitizing health is lower costs for insurance companies, while patients are made more responsible for their health.

For centuries, taking action at a distance was a technique only available to those in power, especially those with access to armies. Moreover, these actions occurred within a carefully constructed milieu. Foucault (2007) writes, "The space in which a series of uncertain elements unfold is, I think, roughly what one can call the milieu...What is the milieu? It is what is needed to account for action at a distance of one body on another. It is therefore the medium of an action and the element in which it circulates. It is therefore the problem of circulation and causality that is at stake in this notion of milieu" (Pp. 20-21). Here, Foucault was talking about urban planning and the making of a town. Urban planners have to think about, not only the needs of the current community, but also for the coming community. For these planners, preparation for the future requires an understanding of what is possible to construct today with a vision of potential risks to the safety of tomorrow's population. Yet, in many cases, the construction of a milieu both produces and constrains the capacities for development, similar to McLuhan's concept of the medium.

From the mapping of roads to the layering of telecommunications systems on top of electrical wires, cities and towns are milieus under constant under construction and continuous repair. In many ways, each new improvement to infrastructure brought along with it many unexpected obstacles. For example, the electrical system developed alongside roads because many obstacles, such as trees and shrubs, were already removed (Hughes 1983). Initially phone lines were hung from place to place to ensure a direct connection (Lapsley 2013a). With widespread adoption of the phone, urban planners figured out that laying phone cables on top of the power lines ensured greater

connectivity to a larger population at a lower cost. Unexpectedly, this created a problem where the electrical lines interfered with the telephone signal. Alexander Graham Bell solved this problem with the "twisted pair cable" that crossed the wires and mitigated the degradation of the telephone signal. There was no way to predict that the electrical lines would cause the phone cables to act erratically. Later, modems were built in accordance with telephone protocols so that new cables for the internet did not have to be laid across cities and towns. However, this caused numerous problems with busy phone lines and the enormous demand for new phone numbers resulted in the adoption of many new area codes. In the same way that the town is process and a product, so too is the internet.

The layering of infrastructure on top of an installed based effected government regulations for data distributed through the internet. Because telephones are legislated as common carrier services, they must provide equal services to each area without discrimination (Gillespie 2010). The internet was a default common carrier when it traveled through the phone lines, but when the infrastructure of the internet changed to cable wires so too did the options for regulation. Further complicating the regulatory issues, data transmitted through a cell phone is not considered common carrier, but the ability to make calls is regulated in this manner. Yet, because cell phones transmit data through radio signals, they do have to follow rules mandated by the Federal Communications Commission (FCC). However, the FCC is under court order to treat cell phone companies not as common carriers. So, the FCC can require that cell phone companies must allow roaming at reasonable rates, but the FCC cannot

require that cell phone companies provide equal access to high-speed broadband to each user. While this is the situation in the US, the internet is global.

The politics of building communication infrastructure are muddled as conflicting interests are matched with fast-paced innovation. Due to the unprecedented demand for digital data to stream information, fiber optic cables are thought to be the optimal carrier of the internet in the future. However, these cables are not regulated under common carrier laws. While the question at the turn of the millennium was how to get more people online (Castells 1999), the question for the state today is how to control the population of internet users? How should this net infrastructure be built so as to ensure adequate state oversight to minimize abuse, while also providing enough privacy for users and security for data? Additionally, questions of who should have access to the internet and at what speeds concern not only the public, but also corporations and the federal government. The situation is a double bind. In order to nationalize the web in order to monitor and control it, the federal government must designate the internet as a common carrier. However, the consequence would be that profiting off of data distribution would be minimized for service providers. This is not only a process of technological change, but requires the activation of a large apparatus of managers, administrators, experts, and security forces to build the capacity for a networked society directly into the physical landscape so that it maps on to every city and town to maintain continuously connectivity.

The information milieu of the internet is a constant process of building for the future community, but increasingly states seek to regulate it as a territory for the

security of the population. Thus, regulation and internet crime bills are attempts to ground the space of flows to the territories of the state. While the telephone industry, particularly Bell Labs, was instrumental in shaping how telephone infrastructure spread across the US, now telecommunication conglomerates such as Comcast and Time Warner seek comparable influence over net neutrality laws. Yet because the internet tethers the space of flows to the space of places through hard infrastructure, globalization of the web depends on states and corporations cooperating to lay the physical infrastructure across the globe, be it in the form of optical cables or drones that carry WiFi signal to remote locations. Here, the scientific question of how to build the internet is inextricably bound to the political questions of how to regulate it and how to punish misuse.

Technologically Dense Environments as Arenas of Participation

The infrastructure of the web does not solely depend on these two stakeholders to settle these conflicts. Users can intervene and they do, but not in the places one might expect. The concentration of peer-to-peer connections through Web 2.0, particularly on social media, is a technologically dense environment that requires intensive organization of information to produce social action. Because websites like Twitter, YouTube, and Facebook that provide spaces for users to interact are not used in the same way by each user, it is useless to legislate sites individually. Of course, terms of service agreements act as the rules of those cyberspaces, but cases of misuse usually require other users to report misconduct. Moreover, there is no cultural identity attached to the Facebooker, Tweeter, Googleer, or YouTuber. Instead, these

cyberspaces are empty vessels through which multiple communities of practice congregate and make themselves known to one another through the formation of interest groups. In most instances, the categories used to describe each community reflect offline worlds as much as they do online ones. Groups dedicated to health, entertainment, sports, fashion, parenting, etc. float about from platform to platform. For each social or political cause, there is a constituent network of change agents who use the internet to disseminate information from wherever they are located. This is an important point for understanding the milieu of the internet as containing the capacity for *action at a distance*. The space of flows becomes heavily connected to places through the adoption of technologically dense environments in different spheres of everyday life. Now, it is inconceivable for many to leave home without their phones because its absence creates a disconnect between the user and their networks.

On any day in the information milieu of protests online, Spanish activists may compile information about US drones over Pakistan and share it on Twitter, while activists in Hong Kong connect with protesters in Egypt to discuss democracy through an IRC chatroom. Actions like compiling and sharing information across networks has become a rote practice for activists since the days of pamphleteers. There is nothing necessarily new about this except the speed at which information travels, the form it takes, and how many it reaches. Additionally while some sociologists interpreted the actions of Occupy protesters as spontaneous, activists who were doing the work of marshalling information online understood that they were assembling groups through the construction of an information mosaic, a collage of pieces of information pulled

from many sources and sorted to form a narrative. These information managers were giving shape to contents of the space of flows, connecting disparate streams of information by assembling dossiers and files, which then circulated from digital platform to political platform. But, it was not just the activists who were learning from these methods of content distribution. As activists adopt new digital platforms, the state and market seek to learn from their innovation and control the space of flows through threats of arrest or lawsuits for individuals and regulation for the rest of the population. Consequently, the contemporary information milieu that shapes the actions of protesters online moves quickly, which gives a scattered and disorganized feel not just to the political platforms of the protesters, but also to the human capacity to synthesize and act on information as it moves through this TDE.

There are, however, crucial differences between how protesters manage the abundance of data and how other spheres of human activity solve the problem of making information actionable in the network society. In this way, I understand TDEs as arenas in which communities of practice come together. Following Clarke (2003), analyzing arenas means to "lay out the collective actors, key nonhuman elements, and the arena(s) of commitment and discourse within which they are engaged in ongoing negotiations—meso-level interpretations of the situation" (554). To better understand differences within arenas of participation, I describe how TDEs operate in high finance, the culture industry, and digital labor to show how internet users influence the relations of production. Each example reveals different strategies applied by users, the state, and corporations to mediate the complex relationship between technology,

capitalism, and freedom. It is not that technology makes us more or less free, but rather that the widespread adoption of technology changes the ways we interact with one another. Significantly, uneven distribution of communication technologies can advantage some groups more than others. The politics of inequality are built into the design and in the use of these technologies. My task is here is to sketch a history of the present to illustrate how technical questions about the use of a technology become political questions about the effects of that technology on social relations.

As Marx wrote in *The Poverty of Philosophy*,

In acquiring new productive forces men change their mode of production; and in changing their mode of production, in changing the way of earning their living, they change all their social relations. The hand-mill gives you society with the feudal lord; the steam-mill, society with the industrial capitalist.²⁵

For the TDE of high finance, what new social relations does heavy reliance on fast algorithms bring about? For the culture industry, how does the digitization of products change not only the nature of distribution, but also the character of production and consumption? Looking at digital laborers, what new configurations of work, play, and home are made possible by mobile broadband? Who are the bosses and what are the possibilities for worker solidarity? Of course, there are other cases that could be considered here such as the effects of TDEs on health or the media, but the chosen cases provide insights into the ways in which platforms and algorithms are displacing human decision making, how the design of platforms can be manipulated or regulated to change user's behavior, and how platforms are utilized and/or developed by users to

 $^{^{25}}$ Quote taken from the Marxist archive: https://www.marxists.org/archive/marx/works/1847/poverty-philosophy/ Last accessed 5/20/2015

accomplish their goals. I chose cases where the technology was working as intended without glitches to show how these TDEs are susceptible to acts of sabotage and protest because they rely on networked information.

High Finance

Both the TDEs of protesting and high finance rely on public and private networks of information and specialized internet applications to carry out their work. Trust and validity of information becomes more difficult to adjudicate as sources of information proliferate. Whereas with protesting reputation of the source matters in order to validate the accuracy of the claims being made, in the case of high finance these once human decisions about who to trust and how to organize information get automated to ensure maximum profitability, a problem that Weiner addressed in 1950. Weiner (1988) feared that too much automation (or machine to machine communication) could lead humans to rely on technologies instead of abstract human thinking. The process of how decision-making on Wall Street shifted from people to algorithms is instructive because it shows the limits of technology to replace creative human labor.

Digital networks, information, and trust are the foundations of the network economy in the information age, but trust is not necessarily a characteristic of individuals but of information. A consequence of the change to a post-industrial society in the 1970s, particularly in America, is that the economy came to rely heavily on the continuous flow of information from one space to another. Particularly, the

computerization of the stock exchange in the 1970s-1980s reconfigured older face-to-face networks, dramatically increased the frequency of trading, and expanded global markets (McGowan 2010). While floor trading remains a popular image of how stocks are sold at the New York Stock Exchange, this practice became fully electronic in the 1990s to accommodate the growing number of transactions taking place across the global market. In order to become faster, larger, and more profitable, decision-making was separated from its human limits. Additionally, because these algorithms rely on networked information to make decisions, the context shifts from local and specific circumstances to the global economic milieu. Here then, decisions about coffee prices depend just as much on environmental factors and demand, as they do on global conflict and oil production. Increasingly, large tech corporations also take into account the actions of protesters to malign their brands online and offline in order to prevent losses to their company's value by promoting themselves as "ethical" corporations.

The adoption of new ICTS not only rearranges the relations between people, time, space, information, and money, it also shifts the burden of validating facts and decision-making from humans to computers. Yet, heavy reliance on fast algorithms can have disastrous impacts. Automated trading programs trust torrents of information from hundreds of inputs. When hackers usurped the Associated Press Twitter on April 24, 2013 and tweeted "Breaking: Two explosions at the White House and Barack Obama is Injured," the markets dropped dramatically; losing 136 billion in three minutes according to Bloomberg News. A prank with effects of this magnitude would have been impossible with face-to-face trading. Unlike face-to-face networks where

impersonation is difficult, identity on digital networks is flexible and unstable. In this configuration, those who produce information and those who rely on it have little, if any direct contact with one another except through technologically mediated exchanges on different platforms through algorithms. While news outlets control what goes on in the studio and can change security practices as needs arise, they have no power to change how Twitter works and must work around its protocols to ensure information security. Because these exchanges move so fast, there is no definitive way to establish identity or even uncover fraud in real-time, so more algorithms are layered to detect suspicious activity after it happens.

The control of information online is a key site of contention in an age where entire companies conduct much of their business in the spaces of flows, store most of their knowledge in digital clouds, and act on information so quickly that they cannot assess its legitimacy. Moreover, because markets rely on networked information and place a high value on media outlets doing the work of verifying news, social media platforms like Twitter will continue to be a target for protesters. This is a class war of information, where online identities and passwords are crucial points of access to knowledge and power. However, lawmakers as well as corporations know targeting each piece of digital content independently is an impossible task as is shutting down websites to prevent unauthorized flows. For those interested in obtaining such information, there is a way around such obstacles. Thus, networks of users are the subjects to be governed, not individual people or pieces of content. For example, protest ensembles like Wikileaks and Anonymous have gained legitimacy as political

forces because the information they share tends to be authentic and reliable, well, most of the time (Coleman 2014).

Culture Industry

While governing the information milieu of the internet is a task to be legislated by the state, it is often accomplished by corporations using the courts to protect their own interests. The case of Napster and its battles with the music industry illustrate this point. Napster was an online peer-to-peer file sharing client introduced in 1999 and taken offline following a court order in 2001 (McCourt and Burkart 2003; Feder 2003; Green 2002; Riehl 2000; Spitz and Starling 2005). In that span of time, Napster accrued 6.7 million users who were consuming and distributing music for free. While it is a well-accepted proposition that the law lags behind technological change, many still believe that the drive to compete in the capitalist market spurs the best innovation.

With the invention of the World Wide Web and shared HTML protocols, however, information that travelled along the wires moved faster than both capitalism and the law for commodities that could be digitized, particularly songs and images. Moreover, the design of Napster itself provided an early model for social networking platforms with its chat and private messaging functions. In the wake of Napster's demise, some users who also used the same avatar across multiple platforms were able to find each other and organize protests using different online forums.

In 1999, it was easier to illegally download music than it was to purchase MP3s online (McCourt and Burkart 2003). The iTunes music store only opened in

2003, which was preceded by MP3.com- a company that paid artists a royalty for each time their song was streamed online. Music publishing companies were scrambling to prevent such widespread dissemination of content online because they did not have the digital infrastructure in place to manage e-commerce themselves.

Similar to the ways that bodies became digital diagnostics as I discussed earlier, transmuting media products into code was the undoing of their physical commodity form. Through digitization, print, music, and video were freed from mass production in factories in the late 1990s. Within a decade, they were also liberated from shelves as the stores themselves disappeared; withering large companies such as Borders Books, Tower Records, and Block Buster Video. Of course, the transition was not total as one can still find books, DVDs, and CDs, as well as older media like cassettes, VHS, and vinyl, but these are increasingly becoming niche markets. While it could not be predicted at the time of the invention of the compact disc in the 1970s, the format contained within it the ability to duplicate sound without any loss of quality, a feature not possible with analog recordings.

The case of Napster is instructive because it shows the extent to which digitization has changed material production while at the same illustrates the power of internet users to shift platforms when they are targeted by state and corporate interventions. Initially, Napster was not developed with a profit motive (Riehl 2000). Nevertheless because it grew so large, the cost to maintain it required millions of dollars. Napster sought to be an infrastructure whose users would populate it with content, like a library with empty shelves. However, the infrastructure can be very

expensive to maintain when it requires a lot of hardware and specialized support.

Before Napster, music was traded online through blackboard messages, FTP, IRC chat, and Usenet pages, but there was no federated place to search a wide catalogue of media. By connecting people peer-to-peer, Napster not only made it possible to browse other user's music files, but also to download a single song from an album.

This is critical because hard drives were very small and large file transfers could take a long time due to bandwidth constraints. This meant that sharing single music files was a better option than the zipped files of full albums available on other sites. As well, the small size of MP3s meant that a user could store and play it without top of the line computer equipment.

Due to these affordances, the music industry was set to lose the most market share. Mp3s were just small enough to be distributed online and they could be quickly copied on to CD-Rs for archiving or for use on portable CDs players. Video content required technological upgrades for data transfer speeds and larger hard drives, so it took some time for the movie industry to face similar obstacles.²⁶

This was not the first time the publishing industry, especially those involved in music and movies, claimed they would be ruined by widespread technological change. In the early 1980s, music industry representatives in Britain initiated a campaign called "Home Taping is Killing Music" to shame those who used blank cassettes to record and trade music. Additionally in 1984, American movie distributors (Universal Studios) sued the makers of Betamax (Sony), an early version of the VCR, for copyright infringement because Sony machines could be used to duplicate movies and record television (Feder 2003). Universal Studios lost on the basis that using a recording device to "time-shift" TV programming is fair use. Further, the courts noted that because the function of taping has legal uses, Sony is not responsible for users who take advantage of the capabilities of the machine to commit piracy. The dissenting Justice's opinions offered a solution whereby Sony could create a mechanism that prevented the recording of unauthorized materials, similar to the codes now embedded in copyprotected CDs and DVDs. Sony never augmented the machine though and VCRs sales grew steadily until the introduction of DVD players. Unlike home audio equipment or VCRs, Napster was built differently and its infrastructure contained the capacity to manage users' actions.

Whereas with cassettes and VCRs the assumption was that taping was for personal use, the openness of Napster's network showed the extent to which online networks shared and copied MP3s. It was easy to see who had what files and to obtain those files within a few clicks. Napster became the "the right tool for the job" for publishing industry executives who sought to control the spread of digital media and change the behaviors of online networks (Casper and Clarke 1998). Casper and Clarke (1998) argue that certain technologies become the "right tool for the job" not because they are the best at accomplishing a given task, but because they contain within their structure enough ambiguity and controversy that certain stakeholders could use them to achieve specific aims. They write, "'rightness' of a tool may be constantly constructed and reconstructed in diverse ways, at multiple levels of social organization, by actors with a multiplicity of perspectives, operating in complicated social worlds, with diverse interests and agendas, which may all be varyingly addressed over time" (Pp. 276-277). Analogous to the questions of power in infrastructure, when thinking about technology as the "right tool," one must ask: for whom and why? Although the makers of Napster believed that their product merely facilitated exchange of bits and bytes- after all no music was housed in a central server- Napster was not the best technology for sharing music online because users could be identified, monitored, controlled, and punished. As a result of this case, copyright law extended itself into the internet as the music industry commandeered a new method of distribution through which it could charge consumers the same prices as they would in a store.

Ultimately, because Napster could theoretically prevent the transfer of copyrighted content but did not, the courts ruled it was platform for vicarious infringement on copyrights and issued an injunction in 2001 (McCourt and Burkart 2003; Feder 2003; Green 2002; Riehl 2000; Spitz and Starling 2005). Napster tinkered with the technology in an attempt to make it profitable and piracy proof, but software engineers could not satisfy the courts requirements that no illegal music be shared through their service. Moreover, Napster users actively circumvented each attempt to prevent the sharing of certain copyrighted files by altering bands' names and song titles slightly to form a new searchable keyword. Similar to the arguments about timeshifting made by Sony (Feder 2003), attorneys for Napster argued that "spaceshifting" files from hard drive to hard drive should be fair use (Klein et al. 2002). However, none of this convinced the courts that Napster had legitimate uses outside of piracy. If the publishing industry had not intervened, the archive of music available through Napster could only be compared to the Library of Alexandria; a major accomplishment for the cultural commons.

Even with the injunction in hand, the real target of the industry was the behavior of the digital network of users. The ruling stopped Napster, but other peer-to-peer applications flourished. A public shaming campaign followed as a cavalcade of celebrity musicians offered opinions against Napster suggesting that file sharing was bad for artists, despite the fact that lesser known musicians often benefited from the free distribution of music. Media outlets contributed to a moral panic about copyright infringement by covering stories of former Napster users- usually young teenagers-

who were sued by record companies for hundreds of thousands of dollars (McCourt and Burkart 2003; Feder 2003; Green 2002; Riehl 2000; Spitz and Starling 2005; Klein et al. 2002). Yet, no single court order, public awareness campaign, or even the disappearance of Napster could undo the knowledge gained by users who grew accustomed to downloading music for free.

Moreover, the public obtained a sense of the power of networks pooling their resources to unsettle these industries. While Napster is not commonly understood as a social network, the chat function of the program allowed users to connect one on one or in chatrooms to discuss anything from music to politics as well as the future of Napster. Users could also make lists of other users and chat privately. Protesters who rallied behind Napster for actions in physical locations organized through chat functions of the client itself and through message boards.

While large publishing and distributing corporations lost out when trying to legislate against cassettes and home video, Napster was the "right tool" for the publishing industry to repress file sharing. The once open networks of Napster retreated in order to avoid prosecution (Green 2002). Those worried about anonymity online switched to bit torrent services that scrambled content across multiple nodes in an attempt to make it difficult to detect the original source. More so than other peer-to -peer networks; bit torrent reflects the packet switching system that the internet is built on. No file travels together, but is instead broken into small pieces so that each byte moves along at different rates over many routes. The file is reassembled upon delivery. Unfortunately, with the turn to bit torrent, the networks of users are also

scrambled. While there remains a vibrant community of activists advocating for internet freedom, the case of Napster also illustrates how platforms carry with them communities who are brought into being through the design of the software. The technology itself is neither lawful nor unlawful, but the users' behavior is the object of legalistic intervention because it troubles already established markets.

Whereas society accepts that books should be made freely available to all through public libraries for the production of a literate and knowledgeable citizenry, the music and film industries were reluctant to place their goods into public circulation. As the turn to faster streaming digital media made this living library a reality through Napster, these publishing industries fought against users to ensure their continued reign over the ownership of content. Now, with the popular acceptance of content delivery through clouds (Netflix, Spotify, Hulu, Amazon Prime), hard drives installed on laptops are getting smaller as content is accessed through subscriptions for data streaming. At the same time, data consumption is getting more expensive too. Ownership is much clearer with subscription services as users are forbidden to make personal copies of music and movies from these content providers or to share access to their accounts. Not only does this shift a great deal of content physically out of homes and libraries as CD and DVD collections dwindle, but it also requires perpetual subscriptions for continuous access to content. This further burdens the network with constant traffic. As opposed to streaming, if you download something once it is exists on your hard drive for as long as the user desires. However, if the goal is to make perpetual profit then allowing the user to own the content is a terrible business plan.

Moreover, the merchants of online subscription content warehouses and similar new industries that leverage networked applications are changing not only the means, but more importantly the relations of production.

Digital Labor

According to Castells (2009), transmitting information and receiving information is currency in the network economy, which produces a division of labor with two spheres: "self-programmable labor" and "generic labor." As Castells (2009) stipulates, "Self-programmable labor has the autonomous capacity to focus on the goal assigned to it in the process of production, find the relevant information, recombine it into knowledge, using the available knowledge stock, and apply it in the form of tasks oriented towards the goals of the process" (p.30). As Turner (2009; 2006) suggests, high tech work is imagined to be creative and free from the stranglehold of corporate cubicles particularly by those who work on open-source products. Contrary to this, generic digital labor is still dominated by clock time and refers to tasks that are required to conduct business, yet hold little value. When possible, these tasks are often relegated to machines or moved to lower-cost sites with ready-made workforces. Within these two spheres, the relations between workers and owners vary greatly as autonomy for those who are paid well is considered a virtue, but for those who make low wages, autonomy is oppressive.

Importantly with the turn to digital labor, new subjectivities of workers materialize. Within the regime of self-programmable labor, workers are labelled as

knowledge workers and/ or the cognitariat. Castells (2009) says of the knowledge worker, "The more our information systems are complex, and interactively connected to databases and information sources via computer networks, the more what is required from labor is the capacity to search and recombine information. This demands the appropriate training, not in terms of skills, but in terms of creative capacity, and ability to co-evolve with organizations, in technology, and with knowledge" (p. 40). For these workers, appendages such as computers, mobile phones, and consistent connectivity to the internet become necessities, like food, water, housing, and clothing. Without these tools, work cannot travel through the wires from the office, to the home, to the café, to the bedroom, and everywhere else the worker goes. As mobile communication technologies become more engrained in the structure of everyday life, it is getting harder and harder to disconnect from the web.

Italian theorist Berardi (2005) describes knowledge workers as the cognitariat, flexible workers whose labor consists of spending a good deal of their time thinking about and moving knowledge from one place to another. They gather, analyze and assess data, facilitate collaboration through online tools, and think critically about future directions. The flexibility of these workers is not simply a characteristic of their identity as freelancers, but also illustrates the fragmentation of work into small tasks that are paid for piecemeal. Additionally, the transformation of office cubicles into office cultures reinforces the atomization of the worker's collective identity through the rhetoric of teamwork (Kunda 2006). Decades of refining the practices of office management has led to one conclusion: office cultures that emphasize hierarchy

inspire workers' resistance. According to Berardi (2005), the cognitariat who work in the high tech industry "tend to consider their work the most important, most singularized and most personalised part of their life-- the exact opposite of the industrial worker's situation, for whom the eight hours of salaried service were a sort of temporary death from which one awoke only when the stop-work siren went off." However, this situation was temporary for many. As computing became ubiquitous in the mid-2000s, job security waned for these autonomous laborers too (Turner 2009: 77).

As the internet grew in size and networking capacity, the potential for outsourcing small and routine tasks increased. In situations where machines could not do the routinized tasks that companies deemed necessary, like sorting email into useful categories, the market for repetitive and mindless digital tasks done by humans proliferated (Irani 2013). Research on tech workers who do generic labor or "crowdworkers" indicates that flexibility does not translate into greater autonomy and higher wages (Ross et al. 2010; Irani and Silberman 2013: 611). Rather, at the same time that digital laborers increasingly rely on this piecemeal work to make ends meet, they have a difficult time finding each other because there is no localized workplace. Many platforms for crowdworkers do not provide a space where users can communicate with one another across the network. Without this affordance, communication is narrow and vertical within the platform itself, but this does not mean users do not go elsewhere to meet his need.

With the turn to digitized and distributed labor, the workers are part of the infrastructure itself and increasingly, workers are packaged as the product replete with their own equipment to get the job done (Irani and Silberman 2013). By selling generic labor as the product, owners no longer need to build a factory, provide reliable tools, train employees, or acknowledge cries to respect worker's rights. For the cognitariat and crowdworkers alike, the information milieu of the internet is a TDE that encapsulates the factory floor, the workshop, the front of house, as well as the distribution system. Gradually as more industries move online, it is up to these workers to carve out a space where they can communicate, organize, and oppose exploitation.

Significantly within the network society, the creation of a collective identity is a site of resistance to the space of flows and timeless time because collective identity "grassroots" the local in specific experiences (Castells 2009:34). In the case of the Zapatistas, they resisted incorporation into global capitalism not by dropping out, but instead they used the internet to drop into the western world by declaring their independence in 1994. Activists all over the world were able to access information about this group who were fighting for independence. While this is a radical case, other groups have started to use the internet as a meeting place to organize. Search algorithms embedded in each site enhance the ability users to find one another across platforms.

For those in high tech jobs, collective identity within the labor force is diffuse because the milieu of digital labor is fragmented, distributed, and disconnected

through space and time. More recently, it is within identity-based movements that crowdworkers are fighting for human rights. However, without a proper workplace it is difficult to even find one each other, much less get organized to demand change. The lack of a workplace challenges crowdworkers to organize against anonymous bosses, taskmasters, or "requesters" as is the language used by Amazon Mechanical Turk (AMT). AMT describes itself as "a marketplace for work that requires human intelligence. The AMT service gives businesses access to a diverse, on-demand, scalable workforce and gives workers a selection of thousands of tasks to complete whenever it's convenient."²⁷ AMT is essentially, Napster for human labor. While Napster was metaphorically an empty library, AMT is an empty warehouse waiting to be populated by workers who are paid only when work is ordered and finished. While the mission statement of AMT emphasizes autonomy and flexibility, Irani and Silberman (2013) show that AMT workers are exploited by the policies of Amazon, which allow requesters not to pay for completed work if it does not meet their standards. Workers were angered by this policy and with the extremely low pay for certain skilled tasks such as programming and transcription. Significantly as a technique to further remove itself from being seen as an employer, Amazon does not refer to pay as workers' wages, but rather as "rewards" for completing tasks. Complaints against these exploitations were largely ignored by Amazon.

Out of this exploitation, new possibilities for a collective identity were built upon a digital platform, Turkopticon, which holds requesters accountable for the work assigned and the wages offered. The platform allowed crowdworkers to rate and

²⁷Source: https://www.mturk.com/mturk/help?helpPage=overview Last accessed on 12/16/2014

comment on the requesters, thus making the relationship between employer and employee not only visible, but also accountable to one another. Crucially, platforms like AMT reproduce the structural racism and classism that characterizes global industrial labor compounded by sexism as women become more and more ensnared in flexible labor markets (Castells 2009; Irani 2013). Turkopticon attempts to correct the limited autonomy and poor compensation of crowdworkers, while at the same time changing the social relations between employer and employee by giving workers tools for accountability. Especially when contract labor is involved, the worker may have more leeway in critiquing bad bosses/requesters if digital tools allow them to remain anonymous, but still connected to one another. However, insisting that Amazon is a boss and that "turkers" are workers as a frontline strategy for making the business accountable undermines the capacity to remain anonymous if one has to complain directly to the boss/requester.²⁸

Infrastructures as Politics by other Means

By looking at the organization of workers' struggles through digital and political platforms, it becomes easier to understand how resistance in the network society is multi-sited, yet specific and strategic. With Napster and Bit Torrent services, users rallied around a call for a cultural commons to access and share music and digital media. The response has been for the culture industry to move to pay-for-subscription services where it is difficult to own and remix content. With AMT, the

²⁸ Similar strategies and platforms used by employees of Transport Network Companies, such as Sidecar, Uber, and Lyft, allow them to petition for status as employees with specific rights to wages and protections.

autonomous and flexible crowd workforce seeks the rights afforded to employees for fair compensations and redress of grievances. In each of these instances, as well as the example of the recalibration of the stock market through digitized trading, the communication infrastructure used to meet the goals of the organization is at odds with the needs of the users/workers. In every case, anonymity, accountability, flexibility, and distance are issues that are mediated in different ways depending on the circumstance. Napster provided too much transparency for users, which made them liable to corporations and the state, but the stock market and AMT provides too little accountability as automation replaces human decision-making and corporate responsibility. Moreover, the flexibility and autonomy once coveted by some tech workers has given way to job instability and contract work as more and more industries move into TDEs. The Occupy movement found itself within this social milieu.

Most importantly though, because the platform of Napster provided within it the affordance for users to cross communicate, any attempt at making it more difficult to trade copyrighted material was quickly reverse engineered or worked around by the users themselves. Critically, platforms proffered by new tech companies that rely on crowdworkers provide no such space for inter-worker/user dialogue. The workers/users must either build other platforms themselves, like Turkopticon, or rely on ready-mades such as Facebook, Twitter, Yelp, Reddit, and so on to find each other. This is also the case with networked social movements. For activists, relying on ready-mades can lead to similar problems like those experienced by stock brokers, but at the

same time can produce solidarity and action thousands of miles away. TDEs are battlegrounds through which the worker is produced as an activist the moment they attempt to create solidarity across cyberspaces. It will come as little surprise that many of those who grounded the Occupy movement in Zuccotti Park were already jacked into one another through activist TDEs. Yet, using keywords, the call to action spread far beyond their internal networks. It is not the case that Occupy forged its own network spontaneously, but rather it was built on the platform of thousands of already existing personal networks. Critically, keywords and the architecture of search engines provided the stitches that sewed the network together.

I conclude this section with some generalizations about the organization of networked social movements in order to preface the argument I make throughout this dissertation. Studying networked social movements requires analysis of the form and use of ICTs by activists in order to describe how the adoption of different infrastructures influences the collective identity of the movement in local and global contexts. Studying networked social movements from the vantage point of infrastructure brings to light the forms of organization used by protesters as well as the struggle to define a collective identity. That also means understanding how the movement produces an image of itself through the content it circulates as well as revealing what those in positions of power choose not to circulate.

Just as those in high finance work with limited and sometimes incorrect information, so too do protesters. Many protesters have come to rely on social media administrators working as information managers to sort and direct data in order to

produce a coherent narrative, guide strategies, and share tactics. In this way, infrastructures are not neutral sites of deliberative democracy, but encompass dynamic hierarchies and battles for control over access and content. Furthermore, resources do matter for these movements, but they follow similar logics of digital labor and crowdwork, which emphasizes piecemeal work and flexible time. It is not that forms of work transform independently of the rest of society, but also forms of working together change as new configurations are made possible. The work put into maintaining an infrastructure for a networked social movement is usually unpaid. Tasks include sharing information, preparing media, writing content for websites, maintaining the code for websites, making phone calls, writing emails, updating contact lists, administrating social media accounts battling trolls (people who are purposively disruptive in online forums), and other tasks as they arise. These are the same skills one acquires and uses in when working in tech fields.

Throughout this dissertation, I utilize the concept of "net work" to describe how networked social movements accomplish the tasks they set out for themselves. Net work is a project involving multiple skills, knowledges, technologies, and people, where much of the project is carried out within a TDE. The concept of net work helps to grasp how InterOccupy became a virtual organization. Important for the Occupy movement, no one directs how the movement will unfold. Instead, people begin working on an idea, recruit allies, and carry out action without knowing if another group is doing the same thing. The hacker ethos of "don't propose, just do" helped the protesters build a multi-modal movement that melds online worlds and offline spaces.

Those who participate in net work projects are often already employed as knowledge workers. Berardi (2005) describes knowledge workers as the cognitariat, workers whose labor consists of spending a good deal of their time thinking about and moving knowledge from one place to another. They gather, analyze and assess data, facilitate collaboration and think critically about future directions. In the case of Occupy, the cognitariat remix the corporate space of social media for their own purposes, while also taking up public space or "privately owned public spaces" (POPS) as a way to challenge corporate rule. Occupy protesters who were building the net work project of InterOccupy, as well as other projects that required heavy use of technology, were already working "real jobs" where they were consistently connected to the internet. Because WiFi and computers are ubiquitous features of many workplaces and businesses, those managing information for the Occupy movement could do it relatively openly without being sanctioned by bosses.

Critically, it is not possible for everyone to participate in net work projects for a variety of reasons. Importantly, infrastructure as a resource, which includes access, skills, and influence, is not distributed in the same way to everybody in a movement. Similar to the case of the Mechanical Turk workers, the question for the researcher of networked movements shifts from "who are they?" to "how did they find each other in the first place?" and then "In what ways do they collaborate and to what end?" It is not just a question of scale, but also of the metrics of coordination among networks of networks. By looking at the actions of the work of InterOccupy as net work projects, I

avoid the thorny issues of searching for origins and leaders in order to understand how infrastructures shape the arena of participation within the movement.

Just as the patient, library, and warehouse can be transmuted into a space of flows, an analogous transformation of TDE of protesting has occurred over the last decade. Social media platforms are designed to be populated by individuals who continuously post new content through interacting with other groups. Without users, they wither. Interestingly, the copyright protections on much of the content shared across social media sites are often ignored by users, corporations, and governments, which illustrates a broad departure from the days of Napster. If we were to take the long view of the history of the Occupy Movement's communication infrastructure, it would begin with the invention of the internet, move through the development of mass email lists, and finally describe how social media produces enduring networks over time. The shorter history of the Occupy Movement begins with social media, but I should not ignore the fact that the users of social media have spent many years building their networks and using online tools. It is not as if all Occupy protesters signed up for new social media accounts to share information on September 17, 2011. Although, some groups did start new accounts in order to act as the official communication channels for different Occupy groups. The fact that "official" accounts developed at all shows the communication power harnessed by networked social movements to portray a collective identity.

In the next chapter, I highlight the dynamic capacity of the telephone to bring geographically distributed groups together in real time. While Occupy protesters were

battling police oppression and searching for physical spaces to meet, conference calls became a conduit and a support for organizing action across locations. Using genealogical analysis, I show how this affordance was an original aspect of the design of the telephone as a "party line." I also recount the history of phone phreaks, who found one another through exploration of the telephone infrastructure in the 1960s-1970s. By bridging these histories, I demonstrate how InterOccupy took on roles similar to early telephone operators to moderate calls, while also seeking to build a space for discussion, akin to the activism of phone phreaks.

CHAPTER THREE

Towards a Militant Ethnography of Infrastructure

Is knowledge generated by an activist-academic the same as that produced by the activist or the academic? Over the last decade, scholars of networked social movements approached their field of research through militant ethnography and action research (Juris 2008; Juris 2007; DatAnalysis15m). These studies have unearthed incredibly rich histories of the anti-globalization movement from the organizer's perspectives by analyzing large-scale datasets that incorporate the concerns of those under study. For the militant researcher, the critical object of study is not a subject, but the audience is the object. As part of the research design, the militant researcher seeks to understand both the needs and knowledge of the community, and to contribute to the greater goal by informing strategies and improving decision-making of the group being studied.

A consequence of the researcher's level engagement, however, is that (s)he is exposed to a series of bodily and professional risks, including arrest by police officers or career suicide by tenure review boards. Conversely, communities that participate in militant research projects question the ethical commitments of the researcher, who eventually publishes studies in academic journals for other audiences in order to meet professional requirements. Balancing these concerns can lead to confusion about the goals of the research project and how to understand the findings. A way through this

paralysis is to focus on the kinds and context of knowledge produced by the community. In doing so, the researcher shifts concerns away from moral and ethical questions about the community under examination thereby illustrating the specific political issues entwined with the process of how goals are formed, tactics are decided, obstacles are identified, and success is measured, which are concerns of activists and academics alike. Over the course of this study, I used the method of militant ethnography to participate in the creation of the InterOccupy platform, which sought to build communication channels across the Occupy Movement.

By applying Bowker and Star's (1999) method of "infrastructural inversion," I foreground the infrastructure in order to illustrate how protesters both rely on infrastructures of everyday life to connect with one another, but also leverage different combinations of ICTs to collaborate on projects as a virtual organization. Bowker et al. (2010), write, "Infrastructure is indeed a fundamentally relational concept; it emerges for people in practice, connected to activities and structures. It consists of both static and dynamic elements, each equally important to ensure a functional system" (99). Most importantly, infrastructure is under continuous development and is comprised of a relation between technologies, concepts, and people that shifts during use. Studying infrastructure as an essential aspect of a distributed community of practice shows how obstacles are overcome, bottlenecks are circumvented, and technologies mediate interactions (Star 1999). Through the case study of InterOccupy, I illustrate how communication infrastructure is conceptualized by protesters as well as the ways they come to remix the intended uses of ICTs to meet their needs.

In this chapter, I begin by defining the practice of militant ethnography and discussing its complex relation to the subjects of a research project. I elaborate on how I came upon the method and how it has similar goals of other ethnographic STS projects. From here, I describe how Clarke's (2003; 2005) situational analysis approach focuses the project on relationships between actors and actants. This is an especially important methodological step for researchers who study networked movements. As Clarke (2005) shows, it is easy to let nonhuman actors fall by the wayside when thinking about how networks accomplish tasks. By incorporating situational analysis into militant ethnographic practice, the researcher is able to map the relationships between different aspects of the infrastructure (people, technologies, and concepts) in a way that grasps shifts in power across the territory under investigation.

From Laboratory Studies to Militant Ethnography

For this study, I undertook an ethnographic exploration of the Occupy movement's communication commons through action research where participation in the community of practice was integral for analysis. Describing the ethnographic method, Goffman (1961) stated, "any group of persons - prisoners, primitives, pilots, or patients - develop a life of their own that becomes meaningful, reasonable, and normal once you get close to it, and that a good way to learn about any of these worlds is to submit oneself in the company of the members to the daily round of petty contingencies to which they are subject" (p. 7). By becoming a member of the Occupy

movement and the InterOccupy group, I was able to stay close to the participants, understand why certain decisions were made, and become accustomed to the temporal and spatial dimensions of these protests. While Goffman did not write explicitly about method in the symbolic, interactionist tradition, his insights about temporal and situational engagement lay at the foundation of this project.

Not only did I observe the Occupy encampments, in many ways, I tried to do everything I saw others doing and contribute where possible. I attended over one hundred meetings in-person; cooked food; learned horizontal facilitation methods; spoke to the press, police, and politicians; operated social media; checked organizations' email; developed websites; engaged in civil disobedience; marched; occupied public and non-public space; wrote public statements; ran a call center/conference call system; took notes online/offline; interviewed numerous participants; created digital media; participated in SMS text groups; used my telephone to stream direct actions; and helped coordinate several large-scale direct actions.

Because I engaged in various activities across different platforms and among different groups, I began to conceptualize these sites as *laboratories for democracy* each with its own culture and experimental approach to social change. Prior to studying the Occupy movement, I conducted an ethnographic laboratory study of the use and reuse of data at Scripps Institution of Oceanography guided by the principles of participant comprehension, engaging in partnership with subjects, and the mutual entanglement of things and contexts. Significantly, the STS field of laboratory studies

inspired me to think through the concepts of local knowledge production and the role technology plays in formatting hierarchies as well as providing a place for distributed groups to come together (Latour and Woolgar 1986; Mukerji 1989; Knorr-Cetina and Mulkay 1983; Pickering 1995; Knorr-Cetina 1999; Star 1999; Collins 2010).

According to Hess (2001: 234), working in the tradition of the sociology of knowledge, laboratory studies emphasized:

the way in which concerns with evidence and consistency were interwoven with situationally contingent events, local decision-making processes, negotiation among a core set of actors in a controversy, the interpretive flexibility of evidence, additions and deletion of rhetorical markers (modalities) to knowledge claims, and other social or non-technical factors that shape the outcome of what is constituted as accepted knowledge and methods .

The critical turn within laboratory studies is not to mistake facts as acting independently of social, political, and historical contingencies. Instead, the researcher illustrates how a statement becomes a fact within a world of contingencies.

Importantly for feminist science studies scholars, I remained mindful of the "god trick," which seeks, according to Haraway (1988), "to distance the knowing subject from everybody and everything in the interests of unfettered power" (p.581). Haraway offers methodological advice for those conducting research, she suggests, "I am arguing for politics and epistemologies of location, positioning, and situating, where partiality and not universality is the condition of being heard to make rational knowledge claims. These are claims on people's lives. I am arguing for the view from a body - always a complex, contradictory, structuring, and structured body - versus the view from above, from nowhere, from simplicity. Only the god trick is forbidden" (p.

589). Haraway calls for situated knowledge rooted in the "webbed accounts" which must be mapped to understand their complexity, a point I return to later in the section on situational analysis (p. 588).

Additionally, laboratory studies broke down the barriers between the participant and observer. Collins (1984; 1998) pushed for a form of participant observation that required the ethnographer to seek "participant comprehension," where "the field-worker tries to acquire as high of a degree of native competence and interaction is maximized without worrying about disturbing the field site; this ideal should always direct the research effort, even though the degree of competence will vary from study to study" (1998: 297). Collins also consistently shared findings with his subjects and invited their input into the research project. Moreover, Pinch and Collins (1982) advocated analyzing the position of scientific claims vis-à-vis the scientific community with which they engage. As the field of laboratory studies developed, ethnographic materials under study expanded to include non-human actors as well as the influence of political and social contexts on scientific facts.

By thinking about Occupy as a laboratory, I was able to discern how each location contained a distinct approach to calibrating social change based on the relationship between the activists, the local city council, neighboring communities, police, and the media. I paid particular attention to the historical and political contexts of each campsite I visited (Los Angeles, Irvine, San Diego, Long Beach, Cleveland, and New York City) and the political opportunities available to each. Tilly (1978) illustrates how the structure of political opportunities explained why some tactics were

taken up at a given time, while others were not. Building on this, Tilly (1995) described how economic crises, demographic shifts, and the democratization of political institutions in Britain create change in the political opportunity structure thereby influencing the organizational form, chosen tactics, and desired goals of insurgent groups. For the Occupy movement, the cultures of different cities also impinged on the ways that activists conceptualized and prioritized their strategies and tactics. For example, the demands issued by the Occupation in New York City do not address comprehensive immigration reform, which was an important point of solidarity for activists in Los Angeles due to its close proximity to the Mexican border. Therefore, I could not assume homogeneity in values of the global protest, but instead I sought out differences in the ways local knowledge informed political practice. This became especially challenging when hundreds of local groups convened on InterOccupy conference calls to discuss the goals of the movement in a national context. When InterOccupy attempted to make a catalogue of demands based on user input, the number tallied over 700 unique entries.

I was able to use these insights and more as I moved on to study the Occupy movement in 2011. For example at Scripps, we studied how a group of distributed scientists, researchers, and graduate students coordinated their resources, while scaling and leveraging technologies and knowledge to make their data publically available (Donovan and Baker 2011). In our research, we identified numerous obstacles to the open sharing of data, both human and non-human, (e.g., researchers who were fearful of their findings being scooped before they could publish and the technical

inflexibility of data management software). As I became involved with Occupy protesters from around the country, I sought to understand how the distribution of our physical locations and the differences in our expertise could be bridged by different communication platforms and the challenges this may pose. Additionally at Scripps, we unearthed a series of communication problems due to the challenges of building a distributed and interdisciplinary network of oceanographers, social scientists, information managers, and programmers who sought to use the data for different purposes. Similarly, conceiving of the genesis and development of InterOccupy as an interdisciplinary project, that melded the concerns of design with activism, allowed for insight into the ways that protesters use participatory design to address the challenges of networking a vast array of people and political agendas. The consequence of this knowledge-making activity is two-fold: rendering the infrastructures created by InterOccupy visibly impacts the ways networked social movements are studied, as well as having an effect on how new movements learn to leverage ICTs.

Because of this two-fold effect, I pivoted to the research on militant ethnography to think critically about the purpose of my engagement with networked social movements and for a methodological model that incorporates participants' concerns and knowledges directly into the project design and findings. While the idea of participating in social change is present in the work of many sociologists, especially Marx's *Theses on Feuerbach*, participating in protests remained a separate activity from my research life until this project. Initially, I believed my participation in the occupation at Los Angeles City Hall would be brief. The chosen tactic of occupation

required an immense commitment and I mistakenly predicted that not many would be convinced to live on the lawn of Los Angeles City Hall.

A week later, my outlook changed as I helped set up the encampment in San Diego and attended a General Assembly with 500 people. As an activist, I had not experienced anything as inspiring as these camps and it occurred to me that this would make an excellent research project. However, one thing stuck in my mind: these camps were ephemeral. I needed a unit of analysis that could endure beyond the carnival of camps. At this point, I began travelling between camps, gathering contact information, and administrating a regional email list in an effort to organize the southern California occupations. I also started to reflect heavily on what it meant to be doing this activist work with an eye towards knowledge-making that potentially would benefit my career. It felt dishonest, but I was also trying to bring my work into balance with my activism by creating a project that could be useful for different audiences.

Militant researchers have also grappled with this same concern. I was introduced to the concept of working as an activist-academic when reading a blog post written by the CrimethInc Ex-workers Collective titled, "No Gods, No Masters Degrees," which proudly proclaimed, "No job but the inside job!" when describing how seizing resources from employers could aid revolutionaries (Shukaitis and Graeber 2007: 305). They write, "Revolutionary union organizing is as laudable as ever, but the revolutionary who works for the primary purpose of seizing resources should aim for the job with the most resources that requires the least amount of commitment. In this regard, the educational-industrial complex is especially ripe for

looting" (p. 307). In this sense, the academic participates in revolutionary projects insofar as (s)he is able to channel resources towards projects for social change.

CrimethInc suggests that it is critical for the academic to "link the efforts and desires of those within the system to those without its assurances and controls" (p.311).

While CrimethInc makes a case for theft and embezzlement directly from universities, my pilfering has been more modest. At Scripps, researchers from certain countries are not allowed to work on some projects funded by the Department of Defense for fear that these foreign students will "export knowledge." This policy irked me because it explicitly limited access to knowledge for students who were admitted into the program. As a result, I became focused on sharing knowledge outside the university. I took the skills and insights I learned about networking distributed groups at Scripps as a way to organize across Occupy camps. Particularly, the information managers and data analysts at Scripps went to great lengths to understand the preferred communication platforms of each researcher who deposited their data in their database. They also invited these researchers into the data lab, either in person or through video chat, to receive training on using other resources as the database developed, thus fostering data reuse across a larger community of scientists. The network was built slowly and deliberately as users' concerns were incorporated directly into the design process. While InterOccupy did not have the affordance of a long-time scale to develop new tools like the researchers at Scripps, utilizing what was available and making do became an important way to integrate users' criticisms as they arose. Moreover by choosing ethnographic fieldwork to research this movement

as it unfolded, I channeled all of my time, personal resources, and energy into collective projects towards that end.

As I searched for more examples of activist-academics, I found a reprint of this CrimethInc essay in an edited volume on militant research, Constituent Imagination. The editors, Shukaitis and Graeber (2007) write, "Militant research starts from the understandings, experiences, and relations generated through organizing, as both a method of political action and as a form of knowledge" (9). They argue that academics and activists draw insights from one another, but generally it is the activists who engage more frequently with academic texts. Whereas academics are most concerned with creating knowledge about activists and social movements, activists seek knowledge for social change. In doing so, academics create knowledge for the sake of knowledge, whereas activists produce knowledge to organize action. To this end, it is sufficient for academics to claim that writing theory is a political act, which does not require a program for action. Activists, though, tend to disagree (Pp. 22-24). This tension does not resolve by declaring one form of knowledge production superior, but instead calls on the militant researcher to take the kinds of knowledge made by each group as distinct, yet mutually entwined, discourses.

Malo de Molina (2004a) clarifies what projects are best suited for militant research projects, she writes:

They are initiatives that explore: 1) how to break with ideological filters and inherited frameworks; 2) how to produce knowledge that emerges directly from the concrete analyses of the territories of life and co-operation, and experiences of uneasiness and rebellion; 3) how to make this knowledge work for social transformation; 4) how to make operative the knowledges that already circulate through movements'

networks; 5) how to empower those knowledges and articulate them with practices and finally, 6) how to appropriate our intellectual and mental capacities from the dynamics of labour, production of profit, and or governmentality and how to ally them with collective (subversive, transformative) action, guiding them towards creative interventions.

Malo de Molina (2004a) begins by tracing the history of militant research to Marx's "A Worker's Inquiry" in 1880, where Marx published a survey in La Revue Socialiste seeking responses from workers about the conditions of their life and labor. In the mid-1960s, Italian sociologists and activists, united under the banner of operaismo (workerism) took up the notion of worker inquiry for different reasons. The sociologists sought theoretical tools to build better institutions based on the workers' conditions, while the activists sought to use the inquiry to organize them. According to Malo de Molina (2004a), during this period the method of co-research developed, wherein the object under study by the militant researcher is the territory (the factory or neighborhood) and those that inhabit these spaces are subject-researchers who help to transform the object. This is an especially important point for my research as distributed groups, in order to act as virtual organizations, require infrastructure. Infrastructure is not only a set of technologies, people, and concepts. It also forms the site of interaction and, like the neighborhood and factory, can be manipulated by its inhabitants.

Concurrent with the Italian interest in co-research, the incitement to conduct militant research occurred in the US, France, and Latin America. Malo de Molina (2004a and 2004b) reviews how militant research practices in the US developed out of Black and Feminist consciousness raising circles as a way to understand movement

dynamics and to enable movements to self-manage. In France, the work of those engaged in institutional analysis, especially Felix Guitarri and the anti-psychiatrists, sought a micro-politics that confronts institutions through uncovering their explicit and implicit functions. In Latin America, Freire's *Pedagogy of the Oppressed* inspired programs for participatory action research (PAR), where the researcher recognizes the imbalance of power between different groups and seeks to democratize knowledge across them. The methods of PAR travelled quickly to Asia and Africa throughout the 1970s, motivating community action networks and revolutionary movements.

Malo de Molina (2004b) surmises that the experience of today's militant researcher must acknowledge the uneven distribution of knowledge and power, both within academia and within society. She states, "It is no longer that we have been interpreting the world for a long time and now is the time to change it (Marx dixit), but rather that the very interpretation of the world is always linked to some kind of action or practice. The question will be then, what kind of action: one that conserves the status quo or produces a new reality." Moreover, drawing from Donna Haraway and Sandra Harding, Malo de Molina suggests that the researcher must use his/her body as a tool and reject theories that purport to speak from a place of political neutrality. The goal is to devise a method that goes from practice to theory, to revised practice to revised theory, and so on, in a recursive manner. Which method should the militant researcher choose and why? Buried in Malo de Molina's genealogical approach is a series of methods including surveys, focus groups, interviews, and ethnography. In this case, method is not meant to be followed dogmatically, but serves

²⁹ "Dixit" is a Latin for "as he said."

as a point of reflection and analysis. Each application of method does different things and constitutes different actions for different ends.

As Malo (2004a) describes, some militant researchers employ cartographies of power and position. She writes:

The necessity of getting rid of fetishes and ideological backgrounds, too concerned with being and essence, and the necessity of building operative maps, cartographies in process, emerging from dynamics of self-organisation, in order to be able to intervene in the real, and maybe to transform it. They are maps to orient and move ourselves within a landscape of relationships and devices of domination undergoing accelerated mutation. But they are also maps that can help us to situate ourselves in this hyper-fragmented landscape, to identify a point of departure and a link where the production of knowledge and subjectivity converge in the construction of the common, shaking the real.

In many ways, maps became central to my understanding of the Occupy Movement. First, on the grounds of Occupy Los Angeles, neighborhoods developed - travelling across camp meant encountering diverse groups and political opinions. Understanding the physical layout of the camp also meant mapping the class and ideological divisions. Second, in order to see the infrastructure of InterOccupy as it grew, I often made charts that located people alongside the tasks and technology that they supervised. As things shifted and I grew to know the members of InterOccupy better, I became attuned to the broader situation within which we worked and how outside constraints shaped internal debates. Third, recording these contingencies and some attempts at cooption proved valuable for the integrity of our project in the long run. While mapping was an important analytical strategy for seeing how the space of flows

connected to the space of places, my research also required daily ethnographic engagement across many sites.

In summation, the concerns that were raised by laboratory studies and feminist STS scholars coincide with the values and aims of militant ethnography. The concurrent themes of connected engagement, desire to foreground subjugated knowledges, and meaningful participation run through these projects. Moreover, activists-academics do not take the view from nowhere in order to write about movements, but rather they participate in movements in order to appreciate the complexity of protest and the boundaries of available actions. Interestingly, both laboratory studies and militant research projects seek to make *knowledge about* and *knowledge for* the communities they study. It is a reciprocal process of knowledge making and community building.

#Occupy as a Technologically Dense Environment

I started participating in Occupy protests from Los Angeles on October 1, 2011. Three months before, I watched much of the initial organizing process unfold online through various websites and social media channels. I was struck by the circulation of information between independently operated websites and chat rooms found on networks owned by corporations like Facebook and Twitter. Sharing information online eventually led to face-to-face meetings and the spread of encampments all over the world. The first occupation began at Zuccotti Park in New York City on September 17, 2011. According to data gathered by Occupy.net, there

were over 1,300 occupations globally by October 15th, 2011, with a high concentration on the American coasts. Within a two-hour drive of Los Angeles there were twenty-one groups protesting under the name of Occupy. Initially, I joined the "Occupation Communication" working group at Occupy Los Angeles and was quickly overwhelmed by hundreds of emails from all over the world seeking information about the movement. In addition to being a participant and researcher at Occupy Los Angeles, I was able to visit and conduct short interviews (about eighty-three in total) at other Occupy encampments including San Diego, Long Beach, Irvine, Cleveland, and Manhattan. Hard infrastructure such as laptop computers, mobile phones, and WiFi hot spots were prevalent at all these locations, which allowed protesters to leverage ubiquitous computing (i.e. the ability to connect to almost everywhere from nearly anywhere).

Throughout the final chapters, I described Occupy as a technologically dense environment where the effect of ubiquitous computing shaped the circulation of information across many sites, allowing protesters to act at a distance from one another. By conceptualizing the field of protesting during Occupy as a TDE, I show how the space of places interacts with the space of flows and how the space of flows shapes the kinds of actions taken in different places. Moreover, studying the TDE of protesting from 2011-2012 illustrates how Occupy protesters are enmeshed within "a global culture as it unfolds across a multiplicity of information channels but within a single informational milieu" (Terranova 2004: 1). Occupy was not the effect of a single email as one sociologist claimed, but rather it is an assemblage of multiple

international histories of struggle for dignity and democracy mediated by communication technologies. There is no need to reduce the environment of protesting to a single causal explanation as communication complexity and technological density prove otherwise. Instead, the militant ethnographer asks: how many ways can one plug into the movement? What rules shape participation across platforms? How does power circulate across these networks?

Because it was impossible to foresee the growth of the initial Manhattan encampment at Zuccotti Park into an international phenomenon, no system of coordination or communication was developed at the outset to organize the flow of information between encampments. Activists working in solidarity with Zuccotti Park protesters had to proclaim that they were going to occupy a place in their city or town and coordinate with others to do it. Much of this early coordination of encampments was through discussion boards on Reddit.com, OccupyWallSt.Org (Storg), OccupyWallStreet.Org (Adbusters), OccupyTogether.org, and internet relay chat rooms. As I would later come to know the administrators of these websites and discussion spaces, I found out that there is very little overlap of content or participants between these websites. This signals a much more organic form of solidarity where many people are pre-forming complimentary roles without requiring knowledge of the whole enterprise.

In addition, the uniqueness of the search term 'occupy' was an advantage to those who sought to find like-minded people online as they could tag their content or query "occupy (insert city or town)" on numerous social networks and find one

another. For example, those looking to organize an encampment in Los Angeles began using the hashtag "#OccupyLA" in conjunction with "#OccupyWallStreet" on Twitter in order to promote dialogue between activists who were located in Los Angeles and interested in Occupy Wall Street. This technique of using a pre-existing web platform led to a loosely coordinated group that began meeting in person at a public park in Los Angeles on September 23, 2011. Crucially, because of ubiquitous computing, moving between online and offline forums for communication became the hallmark of this networked social movement. In this way, I spent many weeks in the field, both at physical encampments and in meetings, while also staying attuned to the flow of information online using my mobile phone and laptop. When police raided the camps, the online spaces became critical sites for distributing information about meeting times and places and for building new social solidarities.

As the movement grew, the desire to share tactics and stop increasingly aggressive state repression presaged the need for a robust communication infrastructure. By October 6th, 2011, I was traveling between local occupations sharing news and ideas across the burgeoning southern California network. At the same time, a small committee formed at Occupy Wall Street in New York City dedicated to networking the dispersed encampments across the country via conference calls. This NYC group reached out to other camps via email and text messages to announce a conference call on October 24, 2011. From the grounds at Occupy Los Angeles, I, alongside a few others, called in on a speakerphone and instantly connected to fellow protesters from at least eighty other locations. Quickly thereafter,

I joined the small "Call Planning Team" to help build this national and international communication infrastructure that we came to call "InterOccupy." On the face of it, the desire to use conference calls to network the movement seems curious, but as hundreds of unread emails piled up, activists were eager to speak with one another using this many-to-many platform. As one participant said, using conference calls "makes the movement human." Over the course of this study, I assisted or participated in hundreds of conference calls across the movement on a wide variety of topics, as well as weekly calls as part of InterOccupy's Call Planning Team. I became, and continue to be, a component of the infrastructure.

In December 2011, eleven members of InterOccupy's Call Planning Team from New York, Philadelphia, and Oregon, met in person for the first time. For those that could not attend due to time or budgeting constraints, we used Google's group chat feature to stream them into the meeting live. We held a three day meeting in a Manhattan apartment where we developed preliminary protocols for outreach, website administration, and network theory aided by Clay Shirky, the communication scholar and social theorist. Following this meeting, InterOccupy went from hosting one to five conference calls a week to nearly twenty as team members learned to work together in a more cohesive manner. A crucial element of our discussions was the concern that we could create a trustworthy community. Given the distributed nature of the network and police suppression of encampments, rumors that some members of InterOccupy were government agents, paid union infiltrators, and/or aspiring politicians made it difficult for members to trust each other outright. While fears of co-optation may have been

exaggerated at this point, it was nonetheless important to note the persistence of cautionary trust as it permeated many conversations across the movement.

While I did not conduct any in-depth interviews at these meetings in December 2011, I returned to New York to conduct interviews for the six-month anniversary of Occupy in March 2012 and the one-year anniversary in September 2012. I spoke with twenty-three participants who have helped to build infrastructure for networked social movements. Of those, six interviewees were long-term members of the core InterOccupy Call Planning Team. They were interviewed multiple times over the course of the study. Other interviewees included those who participated in the web design of InterOccupy and those who came to use InterOccupy more heavily in late 2012 following Hurricane Sandy. A final group of interviewees included social media account administrators for the Occupy and 15M movements.

Early on, InterOccupy took the quantity and quality of communication across the Occupy movement very seriously and endeavored to connect people not just for large-scale coordinated actions, but also regional gatherings for localized organization. As part of the "Occupation Communication Committee" at Occupy Los Angeles, we used the conference call services of InterOccupy to organize four large regional gatherings. These gatherings were held in public parks within two hours driving distance of Los Angeles. I attended all four of the meetings, made video recordings, and helped plan the programming. From October 6 to early December 2011, I travelled weekly between Los Angeles, Irvine, Long Beach, and San Diego. As a result, I gained a complex knowledge of the relationships between Southern California

occupations and was able to see the ways in which face-to-face meetings require a particular kind of knowledge distribution and are arranged using a specific set of social media technologies including conference calls, email lists, text messages, and small Facebook groups. Importantly for this study, I highlight how in person gatherings generate a different set of commitments from activists who are more likely to share content via social media with one another after meeting each other. Moreover, because the success of Occupy Sandy relied heavily on face-to-face coordination, I am able to extend these insights further when analyzing that case.

Digital ethnographic methods were also applied during the course of this study (Coleman 2010). In an information rich environment it can be difficult to know which information is credible and which is not. Therefore, identifying how participants judge online content for its veracity will be a significant contribution of my study to the sociological literature in this field. From July 2011 to June 2013, I collected digital ephemera from numerous sources including postings on movement websites and online forums, broadcasted streams, conference calls, general assemblies, and newsletters. Because of the sprawling nature of rhizomatic communication, I also asked participants to identify the public streams of information they deemed integral to the Occupy movement, such as which Twitter accounts they followed, what Facebook groups they participated in, what blogs they read, and what media they viewed as a credible sources of information. This line of questioning contributed much to my understanding of the range of materials Occupy protesters consumed and how those materials stood in relation to the information obtained through the InterOccupy

network. While some of these digital files are text only, others are screenshots and websites that I saved offline. I have periodically archived these streams, websites, and screenshots over the last two years as the movement changed or if participants sent me direct links.

While my study focuses mainly on InterOccupy, I also travelled to Barcelona, Spain in June 2012, where I met with 15M Movement activists who were undertaking a project similar to InterOccupy called N-1, a private social networking site with forty-five thousand members. The 15M Movement was also inspired by the Egyptian occupation of public space and owes much of its offline success to participants' ability to mobilize online networks (Castells 2012). Connecting with activists in Barcelona shed light on possibilities for the InterOccupy network, as well as portended many of the challenges of networking populist movements. Since then, these activists have contributed broadening the efforts of InterOccupy by coordinating a series of conversations via Mumble, open source voice-to-voice communication software. Working with bilingual activists to bridge the Occupy and 15M movements has already led to immense reflection within InterOccupy on the obstacles of building global movements from the bottom up and what kind of technologies are necessary to make these movements grow.

From October 2011 to October 2012, InterOccupy connected to networks internationally and maintained an email list of 33K members. Most of InterOccupy's work has been accomplished without any monetary donations to fund its services. In March 2012, InterOccupy received a grant of \$5,000 from the Movement Resource

Group, spearheaded by Ben Cohen of Ben and Jerry's ice cream. This grant allowed InterOccupy to participate in Occupy's inaugural National Gathering in Philadelphia and covered the costs of associated expenses: hot spots, outreach materials, server space, as well as travel for the small Call Planning Team. Despite the available monetary resources, InterOccupy relied almost exclusively on linking together different ready-made communication platforms to reach the broadest possible audiences. From 2011 to 2013, activists using InterOccupy's platform coordinated such news worthy events as the West Coast Port Shutdown, the anti-ALEC protests, the May Day General Strike, protests for Trayvon Martin and Occupy Sandy. Each of these campaigns required similar communication logistics provided by InterOccupy, including conference calls, posting of notes taken at local meetings, and sharing of information through email lists and social networks.

When New York City was hit with the massive hurricane Sandy on October 30, 2012, four New York members of InterOccupy decided to start an informational website that would tell New Yorkers where to get food, heat, medicine, and other basic necessities. The site quickly expanded as information rolled in and volunteers decided to take action. An email list was devised from previous lists of Occupy Wall Street medics, organizers, and allies. Churches were contacted that would allow donations to be dropped off or to let volunteers cook in their kitchens. As the online and offline infrastructure grew, more and more projects and volunteers were incorporated into the information architecture, including a monetary donation page that raised over a million dollars. During this time, I volunteered to check emails sent

to the main email account for Occupy Sandy, where I answered questions, referred people to the Occupy Sandy hotline, or coordinated transit for volunteers. Importantly, this transition from a social change network into a disaster relief hub illustrates clearly that networks used to distribute information can also be leveraged to circulate goods and services.

Lastly, by not tethering my research project in the space of places, but rather constructing the space of flows as a field site, I was able to continuously participate in the Occupy movement after the camps were raided. From this vantage point, within InterOccupy and by participating in conversations and the planning of actions across numerous places, I was able to expand my interactions with activists across the country and eventually to Europe and South America. Moreover, the decisions we were making about how to build-out the InterOccupy website and which tools would be most helpful to activists required a set of skills I, and others, had to learn as the platform evolved. We did not set out to build a platform for disaster relief, but that goal found us as political, social, and historical conditions developed. By charting the infrastructural changes from Occupy to Occupy Sandy, I document the legacy of the Occupy movement as well as provide a road map for others who want to make social change.

Integrating Situational Analysis with Militant Ethnography

The method of data collection and analysis I deploy is derived from a grounded theory approach and the symbolic interactionist tradition (Goffman 1959; 1961; Glaser

and Strauss 1967; Strauss 1987; Charmaz 2001; Katz 2001; Clarke 2003; Clarke 2005). For grounded theory projects such as this one, the researcher enters the field in order to assess what groups are present; what ways they interact; how they create and maintain social order; and what values, norms, and ethics underpin their relationships. Notably, the researcher does not begin with a hypothesis and set out to test it. This is characteristic of my case, where I went to Occupy Los Angeles to see what was happening and developed a research site, InterOccupy, as events unfolded. As I reread field notes, a theory of communication emerged from working within the movement and with the data I had collected. As categories of thought surfaced, I began interviewing more people and seeking other forms of data that involved the networking of networks so that I could challenge and elaborate on this theory. In this section, I lay out a strategy for analyzing the data I collected over my two years of participation.

Mapping is a constituent practice of the grounded theory approach and feminist epistemology put forward by Adele Clarke as situational analysis. It is also indispensable for militant ethnography. In terms of analysis and findings, Clarke's work (2003; 2005) is a fundamental recalibration of grounded theory method through situational analysis that retains the emphasis on relationships, but seeks to map relations of power across these networks. She describes the postmodern turn to complexity, localization, and situated knowledge as imperative to the method itself, where she develops a three part cartographic exercise to map the relationships between people and things. First, drawing from Star (1983; 1986), Clarke does away with the

simplification of social relations in favor of a dense situational map of entangled individuals, discourses, and non-human elements. The second map involves laying out the social world/arenas of actors, their practices and collective actions. Lastly, the researcher builds a positional map of the discursive range of positions available to actors, including the positions not taken. Finding gaps, silences, and constraints on discursive activity is the hallmark of Foucauldian genealogical analysis (Dean 1999; Carabine 2001; Foucault 1972; 1975; 1984; 1990). Katz (2001) emphasizes a similar point, when performing an inductive analysis, the researcher must identify the negative case that does not fit the theory in order to isolate what makes their case distinctive and to describe the limitations of the theory. Taking these steps allows for heterogeneous complexity to emerge, as the researcher is able to illustrate contentions, contradictions, and a range of motivations for stakeholders.

For example, because the technology of the telephone presupposes a possibility for recording, some self-described anarchists rejected using this platform as a way to communicate across the movement. Moreover, within InterOccupy, we debated the usefulness of call recordings based on a strong commitment to the value of "transparency." It was important to some members of InterOccupy that the calls be documented so that others could listen if they were unable to make the call or if others were interested in a topic but did not want to participate in real time. Later as more and more Occupy protesters were arrested and conversations on the conference calls turned to discussions of property violence, the rationale within InterOccupy for recording calls shifted to one that served both transparency, but also protected users.

We adopted a policy where all calls were recorded in the hypothetical case a user was arrested and a conference call was being used as evidence against them. Because InterOccupy's conference calls were used as a way to coordinate large-scale distributed direct actions, the call planning team felt that recording the calls also protected us from being held accountable for any illegal activities.

Mapping became an orienting activity that I would do as things changed in InterOccupy or within the broader context of networked social movements. My maps were always messy, incomplete and full of erasures. Just when I thought I had captured a workflow, boundaries would shift, volunteers would come on board and/or disappear, or an external situation would need immediate attention. For instance, as we envisioned InterOccupy to act as an information conduit between camps, we were also cognizant of the fact that we were not the only group creating such channels. The issue of legitimacy and communication permeated the first few conference calls within our small call planning team. As it became apparent that another group, Occupy Coordination, was also using a conference calling software (GoToMeeting.com) to bring together different camps, a rivalry developed. Over the first few weeks, at least twelve hours of discussion was devoted to understanding InterOccupy's relation to other groups and how we were going to determine who was afforded time to speak on our weekly open calls. Participation in encampments became an important metric for defining the right to speak, which led to Occupy Wall Street issuing a communique to the movement asking for encampments to form Committees of Correspondence, whose main function was to speak between camps. In doing so, maps I had previously

made of those who were communicating across camps and what technologies they were using changed dramatically as Committees of Correspondence were legitimated.

Alongside these messy maps, I charted a social movement timeline from July 2011 to June 2013 in order to understand the Occupy movement's significance within the broader historical context of the global movements against austerity. While the Occupy movement was only two years old, there were significant changes in its tactical mode of operation, communication, and proliferation of meanings of radical action versus institutional reform. Charting these changes in their historical context is crucial for understanding their impact on participants, as well as identifying when and why changes were made. For example, a dialogue pertaining to the definitions of violence and property damage beleaguered many protesters' reflections on their accomplishments during the summer of 2012. The international context of social change also put pressure on American Occupy protesters to measure their actions in contrast to the successes of other social movements, such as activists in Tahrir Square, Spain's 15M, the Iceland Cutlery revolution, and Montreal's student strike. By fastening my data to this timeline, my research shows when, where, and how Occupy protesters learned from other movements and in what ways they empowered others. To build this timeline, I used multiple sources of information from conversations with members of other movements, blogs, posts on social media, text messages, email lists, livestreams, as well as revisiting my own Twitter feed for lists of events.

To sort and thematize interviews and other data, I used Microsoft OneNote to organize the digitized content. Dohan and Sanchez-Jankowski (1998) recommend that

before choosing a software, one should consider "[t]he amount and kind of ethnographic data on hand or to be collected, the purpose of the research, the epistemological framework of the researcher, and the goodness of fit between the research project and the capabilities of available software" (p. 478). OneNote as a tool for storing and organizing data includes the ability to code field notes, create transcripts and diagrams, as well as categorize pictures, audio and video, link content, and tag information for quick retrieval. Moreover, OneNote is useful for labeling relevant material with a series of keywords/codes. I have organized all physical ephemera, such as pamphlets, signs and fliers, into files in my office. It is important to emphasize that I will not be using everything I have collected for this study. For example, I have downloaded nearly one thousand newspaper articles about the Occupy Movement, but most prove irrelevant for describing InterOccupy. In other instances, I have ethical concerns as some people who were recorded during public meetings and interviewees have pending court cases. Lastly, some items collected, such as signs and pamphlets from local encampments, are not relevant to this study specifically.

After all the data was arranged in a timeline as well as in the digital database, I continued distilling and reducing the data through an initial reading of all collected materials to get a sense of its breadth and intricacies over time. Because I am using both interviews I conducted myself along with recordings of conference calls and meetings between activists, remaining attuned to the environment of the recorded material is imperative. Further, as I read and reread, I took notes of themes as they came to the fore, while also remaining mindful of the purposes of this project to

clarify, describe, and provide recommendations for studying the relationship between technology and social mobilization.

Rereading and recalibrating themes allows for analytic flexibility when identifying the data that "matters" for this study and for sustaining an emic approach to generate concepts (Clarke 2003: 561-563). During these phases, I worked on revising the situational, social worlds, and positional maps until I reached a point of "saturation," where I was comfortable talking about the connection between actors, the discourses involved, and the complex contradictions of an ethnographically and historically rich data set (Clarke 2003: 571). Lastly, sampling of new participants and materials continued until I could provide an explanation for the discursive "silences" found in the positional map. Doing so has required providing an analysis of class; race; gender; sexuality, and, in this study, technological literacy to situate these "missing masses" (Latour 2008). As I approached the point of saturation I began writing up findings, while returning to the data periodically to investigate anomalies as they arose.

Because InterOccupy turned to conference calls as a way to network networks, I was confronted with the question: "What can a telephone do?" Rather than asking, "What is a body?" Deleuze (1978) analyzes Spinoza to query, "What can a body do?" By changing the question from what an object is to what it is capable of, Deleuze points to a different kind of research project that seeks out the limits of the object under examination. Reframing research questions pertaining to infrastructure, especially technology, has contributed significantly to the historical orientation of

Chapter 4 on the history of conference calls. Critically, it is not that the Occupy movement used conference calls to the exclusion of social media or email, but rather that these new mediums did not contain enough organizational affordances to hang up the phone entirely.

By taking a genealogical approach to the question, "What can a telephone do?" I illustrate how InterOccupy used the tools available to early telephone operators in the 1900s, such as a telephone switchboard and knowledge about the community, matched with the ethical commitments of the "phone phreaks" in the 1970s, who through technological experimentation sought to explore the telephone network and free lines of communication globally. By placing the history of InterOccupy within the historical context of telephones, I trace operating and phreaking to illustrate how teleconferencing as a tool for organizing communities was a constituent capacity of the telephone prior to the widespread adoption of private phone lines. Whereas telephone operators were critical elements of the infrastructure that brought communities into contact with one another, they were bound to the rules and regulations of their employers. The phreakers' activities, however, were decidedly in opposition to corporate control of communication and sought every opportunity to make communication free (as in both: "free beer" and "free speech"). Because social movements require the coordination of activities in time and place, the conference call became an important space of consultation and organization for Occupy activists who were distributed across wide geographical spaces or in times when crisis required quick decision-making.

Materials for reconstructing the social world of telephone operators were gathered from newspaper articles about women and telephones, an archive of Bell Telephone News from 1911 to 1970, and academic works on the gendered history of the telephone. Because few historical texts deal directly with phone phreaks, I sought out materials at textfiles.com maintained by internet archivist Jason Scott. Textfiles hosts thousands of files posted on BBS message boards from 1980 to 1995 and contains an enormous library of phreakers' messages, stories, and manifestos from this era. In some instances, materials were collected from other documents of phreaker history archived by phreakers themselves, Mark Bernay and Evan Doorbell, located at wideweb.com/phonetrips. Lastly, Phil Lapsley's archive, explodingthephone.com, is a thorough supplement to his book on phreakers and contains FBI files, court records, recordings, messages, manifestos, and letters, among other documents.

Returning to the Field

In addition to my own participant observation, I took copious field notes and field recordings throughout this study. Because this is a participant action research project, I started a blog, OccupyTheSocial.com, and published some of these notes as well as more extensive reflections on the Occupy movement to gather feedback.

Militant research projects are concurrently committed to producing scholarly knowledge and benefiting those being researched, while asking the community of practice to engage in reflexive and evaluative processes (Freire 1993; Kemmis and McTaggart 2000; McIntyre 2008). Drafts of this research and presentations developed

from it have been provided to volunteers of InterOccupy in order to assess the purpose and scope of InterOccupy's project as well as to improve the dissertation's findings. Some feedback was already incorporated into the discussion of Occupy Sandy in the final chapter. All materials and texts from this project will be open to the public in a web archive.

Lastly, I would like to comment on the scale and scope of this research. It was important to conceive of this research project as a long-term, but open-ended, ethnography in order to chart the cycle of protest. If I centered my analysis on the southern California campsites, the analysis would have stalled with the continued oppression of protesters by police departments. Throughout 2012, the direct actions of Occupy protesters in LA led to targeted arrests, heavy fines, and jail time for many who stayed with the movement. This led to considerable in-group fighting and tension at face-to-face meetings. Likewise, after the raids, the social media collectives across Occupy experienced a rapid influx of new participants who sought control over the accounts, which triggered a great many arguments.

InterOccupy remained a small group of committed individuals who continued to build networks and to support projects in need. In many ways, because we were committed to building infrastructures and not to specific political projects, we were poised to jump in when new and exciting projects came up. When protest activity lulled, so too did the communication within InterOccupy. Many of us felt things were over in the summer of 2012 after the General Strike failed to spark interest in a new wave of protests. However, all of the work that went into practicing infrastructure

proved to be necessary training for providing mutual aid after Hurricane Sandy hit the East Coast. By wading through this time of disillusionment with the goals and purpose of InterOccupy, I was able to see how infrastructures are rapidly redeployed, reimagined, and scaled in times of crisis.

CHAPTER FOUR

Phreaking the Party Line with InterOccupy

In October 2011, I was struck by a comment made by one protester during a direct action planning meeting for Occupy Los Angeles, as she blurted out, "Email can wait! We are trying to start a revolution!" This refrain echoed over and over in my head as I saw my own inbox overflow with emails during my two year engagement with the Occupy Movement. Some days, there would be hundreds of unchecked emails scattered across multiple accounts. Setting mailing lists to 'daily digest mode' shifted the numbers, but did not alleviate the time commitment necessary to read everything. I was not alone. An inbox for OccupyWallSt.Org went unopened for months until someone volunteered to sort through the 10,000 unread messages. Email was only one vector of the information deluge facing Occupy protesters who sought to turn the encampments into a movement for social change.

Driven by the failure of information and communication technologies (ICTs) to bridge local movements and to put people into contact with one another directly, we formed InterOccupy in October 2011 with the goal of connecting the global Occupy Movement. Because the Occupy Movement was structured through autonomous organizing, there was no initial expectation that each local group would want to talk to one another. The desire for direct communication changed when camps expanded exponentially and protesters were arrested by the thousands. InterOccupy, a small

group of protesters from all over the USA, sought to fix the very complex logistical failure of not just email, but all communication platforms, to unite the movement.

During the evolution of Occupy Wall Street from a geographically distributed group of disconnected agitators to a networked social movement, a constellation of technologies grew linking disparate groups. Critically, the Occupy movement fused multiple information and communication platforms together to form a rhizomatic, fast, and flexible assemblage of networks that curated and disseminated ideas. One technology in particular, the conference call, became a central mechanism for building nationally networked projects and synchronizing protests across America. InterOccupy began organizing and managing conference calls beginning in October 2011. Since then, InterOccupy has operated over 2000 conference calls involving tens of thousands of Occupy protesters.

This genealogy explores the information labor of those volunteering with InterOccupy and the history of conference calls to illustrate how InterOccupy harnesses the tools of early telephone operators and couples them with the ethics of the phone phreakers. Specifically, I focus on telephone operators who routed information and people through party lines in the early-mid 1900s and the phone phreakers of the 1960s and 1970s, who hacked telephone networks in order to open lines of communication and in doing so accidently created the first open and free conference call. Following Winner (1980), this research shows that technology is not always neutral, but can also be political in its design and distribution. This is not to say that technology embodies a politics, but they are developed and deployed by humans

who must make strategic choices about design and best practices for using the products. Especially, as Castells (2012) demonstrates, access to new social networking platforms is critical for networked social movements to flourish, but access does not guarantee democracy as the adoption of new platforms requires careful deliberation about its possible effects, intended and unintended. Attentive to the double bind of corporate technologies used by anti-capitalist groups, my research shows how conference calls center communities in time as well as provide a critical space for developing, questioning, and evaluating the values and actions of the group.

These three historical moments (operators in 1900-1960, phreaks in 1960-1970, and protesters in 2011-2012) may seem unrelated. Grouping them together as a set of markers to explain the turn to conference calls within the Occupy Movement runs far afield of typical historical inquiry. For example, few involved in the InterOccupy project previously worked in telecommunications and none were telephone operators. However, the participants in InterOccupy formed a group identity early on as shepherds of a special set of communication tools, Maestro Conference Calling Software, with the capacity to weave networks of networks. Like telephone operators, the InterOccupy call planning team took care to build relationships between constituents, while consciously avoiding intervening in conversations on the conference calls. Taking on the role of operators allowed InterOccupy's call planners to become part of the infrastructure and avoid becoming an organization imposing a political agenda on to the movement. In fact, if a volunteer

on the call planning team did aspire to political office, they stepped back from InterOccupy for the duration of their campaign.

Moreover, the switchboard technology of Maestro allowed up to 500 people to call into a single conference using both VoIP (Voice over IP or calls made using the internet) and telephones Not only did having available lines for 500 participants exponentially change the dynamics of conversation and possibilities for moderation, with some ingenuity by InterOccupy volunteers, VoIP expanded the range of users and lowered the cost of access to the conferences for Occupy protesters all over the world.

Yet, being part of the infrastructure does not mean InterOccupy acted without political and ethical commitments. While the Occupy movement challenged the ideologies of wealth and Wall Street, InterOccupy envisioned the movement as networks of networks that needed to be connected. While Occupy encampments spread rapidly across the world, all types of media were failing to produce not just collective action, but also sustained conversation. For example, because most communication channels, such as radio, newspapers, and television were owned by corporations, coverage about the movement's anti-capitalist ideals was narrow and divisive. As well, social media was so overly populated with information about the movement that it was difficult for Occupy protesters to read everything or verify anything. Most importantly, networks of trust were being built within the encampments, but not across them. InterOccupy is a project built "to foster communication between individuals, Working Groups and local General Assemblies,

across the movement" (InterOccupy 2011).³⁰ It is precisely how to foster communication that became the political task of InterOccupy.

Most involved with co-creating the InterOccupy network do not know what phone phreaking is, but the ethics of phreakers closely mirror the stated aims of InterOccupy. Phreakers dialed around the phone lines to see how the telecommunications system worked in order to bring communities of phreakers into contact with each other. Although describing phreaking as a political movement would be disingenuous, phreaking presages hacking as an act of exploring computer systems and channels of communication for the purpose of sharing information and subverting capitalist control of telecommunication networks. Phreaking, though, does not have the same political connotation as hacktavism, which has come to dominate debates about telecommunications, free speech, and surveillance. Rather, phreakers positioned themselves as neutral, objective, and even scientific about their practices even as they knowingly circumvented Phone Company billing by constructing hardware-blue, black, and red boxes- in order to make free phone calls as a form of civil disobedience (Lapsley 2013a).

Moreover, while many would situate the adoption of conference calls within the history of business, highlighting phreakers reveals how the conference call is a mode of resistance, rather than just a tool for commerce. Thus, further illustrating how technological change is deeply social and political. In fact, the history of telecommunications does not begin with private lines, but the party line. The party line was a shared telephone line that required the operator to receive a number

³⁰ For the full Mission Statement, see: http://interoccupy.net/about/mission/ Last accessed 5/20/2015.

verbally from the caller and then connect to caller to the right extension. It was compulsory for the operator to listen, so that she would know when to hang up. However, anyone else connected to the party line could simply pick up their phone and listen or interject. Early versions of the phone line could not handle the capacity of more than four callers on a call without the voices on the line becoming incomprehensible. Moreover, the third party would have to shout, "Operator" in order to signal that they wanted to make a call even if the line was occupied. In 1946, AT&T released an instructional video on proper use of party lines that shows how the lines work as AT&T's narrator reminded users "Party lines, as well as driveways, or anything else that neighbors share, they're best when everyone cooperates" (AT&T Archives 2012).

Over time phones became better equipped to handle more volume, so listening in on the party line was less detectable and more people were able to talk to each other at the same time. As party lines became more crowded, AT&T likened using the party line to a sword fight between two users on a very narrow bridge, the only way to get across would be to cooperate and share. However, frustration with neighbors' overusing the line for gossiping was a repeated trope of the party line era. Private lines had been available as early as the 1920s, but were very expensive. By the 1950s, private lines were gaining prominence as they came down in price, but it was not until the 1980s that party lines became obsolete (AT&T Archives 2012).

The conference call, or teleconferencing, emerged in the 1960s as a way to bridge multiple locations and provide real-time decision making, specifically in

situations of national and international emergencies. In 1963, The Institute of Defense Analyses, a non-profit that researches the scientific and technical aspects of national security issues, began experimenting with face to face meetings, conference calls, and teletype machines (an early version of a fax machine) to see if different kinds of decisions were reached based on the medium of communication (Sinaiko 1963). The IDA found that conference calls were the preferred medium over teletype because they were faster and allowed for other's to ask clarifying questions. However, the chairman of the conference call noted difficulty enforcing rules upon the group.

As I show later, authority is a difficult thing to convey with only a voice.

According to IDA, teletype was more confusing for users because there was no way to gauge if their transmission had been received, but positively, it was more difficult to establish dominance over others using this method. Moreover, the IDA found higher rates of convergence in decision making over the telephone, as well as a better overall understanding of all participants' positions through phone conversation. By the 1970s, AT&T offered conference calling as a special and expensive service offered to businesses and government agencies (Lapsley 2013a). Also at this time, phreakers were distributing pamphlets and newsletters on how to connect multiple lines.

Miraculously, they were able to cobble together an open conference line from a broken teletype machine. The birth of the "2111 conference," as phreakers called it, was a major turning point in phreaker history because it solidified the network in a way that closely mirrored their practices.

I begin by describing InterOccupy as a "platform" within the communication networks of the Occupy movement. I, then, describe the methods of cultural genealogy used in this historical exploration by showing how genealogical analysis opens new avenues for explaining the technologically-mediated organization of Occupy. Lastly, I recast the history of conferencing calls through the telephone operators, phone phreakers, and InterOccupy participants to show how telephone networks and the capacity for connection enlivens different ways being social and political that was not possible within encampments.

The Platforms of the Occupy Movement

Gillespie (2010) outlines how the term "platform" comes to symbolize the democratizing potential of the internet. Platforms, like YouTube and other sites that depend on user generated content, are "computational, something to build upon and innovate from; political, a place from which to speak and be heard; figurative, in that the opportunity is an abstract promise as much as a practical one; and architectural, in that YouTube is designed as an open-armed, egalitarian facilitation of expression, not an elitist gatekeeper with normative and technical restrictions" (italics added p. 352). All at once, a platform is a place, a politics, a promise, and a plan.

In all of the ways described by Gillespie (2010), InterOccupy has made efforts to become more than just a service, but a platform for the movement.

Computationally, InterOccupy alongside Occuppy.net sought to provide a robust set of tools that each encampment could employ or modify, such as stylized website

templates, note-taking software, classified ads, a chat room, online storage, and mapping applications. Politically, InterOccupy featured calls to action, meeting notes, and blogs from Occupy protesters all over the globe. To stay in line with the movement's desire to remain free from party politics, InterOccupy had to exclude certain forms of political talk, especially conversations about voting and national parties from the website and conference calls. Further, InterOccupy issued a Statement of Autonomy, which reads in part, "We are a party-less, leaderless, by the people and for the people, democratic organization of individuals. We are not a business, a political party, an advertising campaign or a brand. We wish to reiterate that InterOccupy is not and never has been affiliated with any established political party, candidate or organization. We are simply a service to the Movement. We are not for sale."

Figuratively, InterOccupy was proof that the Occupy moment had evolved into a movement capable of coordinating wide spread communication and action. Most notably, the West Coast Port Shutdown on Dec 12, 2011 was partially coordinated using conference calls convened by Occupy Oakland protesters using InterOccupy operators. Over fifty different Occupy locations participated by blocking ports or other major city infrastructure, like highways, to block "the flow and growth of capital for the 1%." Lastly, InterOccupy is a modifiable architectural platform that requires users to generate the content and the conversation. As Nate Kleinman, a co-creator of InterOccupy stated, "We lay the tracks, but it is up to the movement to drive the train."

³¹ For the entire statement, see: http://interoccupy.net/about/statement-of-autonomy/ Last accessed 5/20/2015.

For InterOccupy, becoming a platform for communication was not just rhetorical; it served a vital purpose and principle. Gillespie (2010) writes of the uses the history of telecommunications and users, "before their deregulation the telephone companies were bound by two obligations: first, they must act as a common carrier, agreeing to provide service to the entire public without discrimination. Second, they can avoid liability for the information activities of their users, to the extent that they serve as a conduit rather than as producers of content themselves" (p. 357). As conveners of conversation, rather than drivers, InterOccupy maintained the commitment to leaderlessness put forward in InterOccupy's Statement of Autonomy. 32 Furthermore, this information work, like that of the phreakers, was in some instances quasi-legal. For example, no one in the InterOccupy project knew the content of all of the calls happening, but each of us would report back through email if something raised their hackles while operating a call. Items of concern ranged from action plans that involved explicitly illegal activity such as blocking streets, preparations for evading police, or much more banal things like desires for a national Occupy strategy.

Occupy as a movement is more than a platform because it actively made as it is consumed. Occupy relies not just on users to generate content, but also for users to produce and modify the platform *ad hoc*. In this sense, Occupy is the net effect of the accumulated labor used to produce and maintain itself as a movement. It is a "net work" project, where participants use their time and skills to accomplish a broad objective involving multiple knowledges, technologies, and people. Net work is

 $^{^{32}}$ Statement can be read here: http://interoccupy.net/about/statement-of-autonomy/ Last accessed 5/20/2015

concept closely related to Star's (1999) work on infrastructure, where she describes infrastructure as a process and product where people, ideas, and technology are densely entangled. Net work projects are framed by a set of ethical commitments that guide, but do not direct actions and outcomes. With the Occupy Movement, transparency, accountability, horizontality, and inclusion are values that influence decisions about what technologies to use and how to share information across the movement. Critically, there are many net work projects happening across Occupy simultaneously and, at times, redundantly. For example, while InterOccupy was developing protocols to facilitate conference calls, another group called "Occupy Coordination" was attempting to do the same thing.

Star stipulates that "Nobody is really in charge of infrastructure" (Star 1999: 382). This is because infrastructure is layered over time and involves not just different locales, but also generations of users with different skill sets and characteristics.

Occupy protesters did not consciously make decisions early on about how to build a unified infrastructure, but rather, many infrastructures appeared with similar online and offline platforms and features. Occupy protesters would often share information on Twitter, Facebook, YouTube, WePay, Livestream, Tumblr, Flickr, websites, via text message, over video chat, through email, in meetings, at marches and demonstrations. Yet, because of the distributed nature of this infrastructure with the melding of dozens of platforms, there was no way to get protesters in New York in contact with people in Los Angeles during the early days of the movement. Early on, if someone wanted to guarantee contact, they would have to travel to the location

itself. In a sense, Occupy lacked a shared architectural platform on which to gather and speak to one another. Moreover, the goal of those involved with InterOccupy was not to co-opt these already existing communication channels, but rather to complement them with a shared space.

InterOccupy is a platform embedded within the much more sprawling infrastructure of the information ecosystem of Occupy. The co-creators of InterOccupy envisioned themselves partially as a telecoms system with the capacity to coordinate social action, but also as an autonomous working group like so many others within the Occupy movement. Yet none of this definitional work of describing what InterOccupy is amongst technologies already in use can answer the question: "Why did this movement pick up the phone?" Looking back into the history of telephone operators and phone phreaks informs the adoption of conference calls across this networked social movement as a way to share and verify information, as well as to legitimize Occupy as a movement capable of holding a political platform without traditional party organizing.

Through genealogical analysis, I illustrate how InterOccupy used the tools available to early telephone operators in the 1900s, such as a telephone switchboard and knowledge about the community, matched with the ethical commitments of phone phreaks in the 1970s, who sought to explore the telephone network and free lines of communication globally through technological experimentation. By placing the history of InterOccupy within the historical context of telephones, I trace these two practices, operating and phreaking, in order to show how teleconferencing as a tool for

organizing communities was shaped by both the invention of the telephone party line in the early 1900s and by the phone phreakers' subversion of phone lines beginning in the 1950s.

Furthermore, a genealogical history of telephone operators and phone phreaks complements the ethnographic project by challenging the current trends in sociological and communication research utilizing big data approaches to render the structure of networked social movements intelligible. While social media is an important part of networked social movements, I contend that some big data approaches that focus on numbers of online posts rather than explain the context of content offer a narrow window into the communication networks of activists (Theocharis et al. 2013; Theocharis 2012). By placing InterOccupy within the history of telephone communications, I show how information becomes legitimized as knowledge about the movement through the communication power available to activists who sought to build an infrastructure without formulating organizational hierarchies.

"Hello Girls"

The labor of InterOccupy participants mimics the actions and tasks of party line telephone operators of the early 1900s. Party lines were communal phone lines that connected many members of a geographic area to one single line moderated by an operator. The party line system was good at connecting communities to one another in times of crisis and for spreading gossip (Milwaukee Journal 1959). There were

problems though. Pirates, those who reported to the operator a telephone number other than their own for billing, were a concern as early as 1919 (Deseret News 1919). Party lines fell out of favor as private lines rose to prominence in the 1960s-1970s.

Importantly, as telephone lines spread across the USA, Bell sought only to hire female operators who were unmarried, between seventeen and twenty-six years old, have at least a grammar school education, and be tall enough to reach the ends of the switchboard (Hillstrom and Hillstrom 2007). By 1900, nearly all operators were women. Teenage boys were the first operators, but were known to misbehave and prank customers (Middeljans 2010). The female operator embodied the communication system as her form and tone were integral for the operation of the machine. White women, known as "hello girls," were also the face of the telephone company, which prominently featured them in advertisements as "knitters" and "weavers" of speech (Middeljans 2010). Working 10 to 16 hours a day for substandard wages, operators in cities were subject to surveillance by management and harsh punishment for making mistakes, while rural operators sometimes had a board installed in their own home (Fischer 1992; Kramarae 2004). Despite these challenges, women operators were able to unionize and push for better working conditions throughout the early 20th century (Sangster 1978; Schacht 1975).

By the 1950s, women telephone customers were vilified for having a lack of proper phone etiquette and being "phone hogs" in newspaper articles (Spokane Daily Chronicle 1955; Evening Independent 1944). This lack of tact was sometimes blamed on the fact that most people on the line remained anonymous (AT&T Archives 2012).

Nevertheless, even though many spent all day on the phone either gossiping or working, women's names in the phone book are either absent or listed under their husband's name. Despite this bad reputation as customers, women operators were the moving parts that made the information flow through the telephone network as operators and users.

In terms of the social power of telephone communication, McLuhan (2003) called the telephone "an irresistible intruder in time and space," because no one can resist its ring (p. 238). When analyzing how telephones manage interpersonal relations, he goes on to say, "On the telephone only the authority of knowledge will work. Delegated authority is lineal, visual, hierarchical. The authority of knowledge is nonlineal, nonvisual, and inclusive. To act, the delegated person must always get clearance from the chain-of-command. The electric situation eliminates such patterns; such "checks and balances" are alien to the inclusive authority of knowledge" (p. 239). In effect, telephone communication produced a space where knowledge confused patriarchal relations of power. On the phone, operators had the capacity to listen, connect, disconnect, and interrupt callers. More so, they were the repositories of information.

Due to the unique consequence of telephone communication shifting power to those who hold information, party line users began asking operators questions about the news, sports scores, the weather, and community events. Their tasks slowly expanded to include being a source of verified and reliable information long before you could dial 411 (Hillstrom and Hillstrom 2007: 110). The 411 service was

introduced by Bell in the 1930s to allow callers to directly dial operators and ask for assistance. Yet, despite wielding such power over the telephone network and being respected by the community they served, operators were one of the most surveilled and disciplined workforces of the early 1900s, often having to sit long hours in straight back chairs and ask permission to use the bathroom or to eat (Hillstrom and Hillstrom 2007: 112).

McLuhan stipulates that the non-visual aspects of telephone conversation dispense with formal hierarchies as the content of discussion and the accuracy of the claims take precedence over the marks of social distinction important in face to face interactions. Later, I show how diversity over the phone came to matter for InterOccupy. Critically, the diffusion of the telephone across the US is marked not just by a gendered split, but also by racism. While Bell held an internal policy against hiring black women as operators, by the 1950s black women became a significant source of cheap labor. Hiring black women was not merely a social change, but as a technical one it coincided with adoption of direct dial phone systems that required fewer and fewer customer interactions with operators. A newspaper article in 1956 illustrates how desire to change the phone system coincides with Blacks' access to work, public space, and telephones lines.

The Mississippi Public Service Commissioner requested segregated party lines for Black subscribers, but the Bell manager in the area admitted, "we've got no way of knowing what a customer's race is," and did not pursue segregation further (Washington Afro-American 1956). However, the form of subscription was also

changing as more people adopted private lines throughout the 1960s and 1970s (Gort and Sung 2007). While excluding blacks from becoming members of the telephone community was a concern for users in the 1970s, ensuring diversity across conference calls for InterOccupy posed different challenges as callers could not readily see who is on the end of the line.

Calling All Phreaks

In the 1950s, phone phreakers would explore the telephone system by dialing random numbers and listening to the clicks and beeps. The underlying goal was to understand how the telephone system worked and, of course, to make free calls. Like cyberspace, telephones were connective and held the capacity to coordinate social action, but very few people understood the technical specificities of the hardware. Some phreaks would call Bell and pretend to be another operator with a mechanical question about the system; they would do this many times in an effort to cobble together an information mosaic of how the system works. Calling the phone company and pretending to be an employee is considered the birth of a hacking technique called "social engineering," where someone impersonates or tricks the target into giving more information (Lapsley 2013a: 177). It wasn't that phreaks were simply duping the operators, but rather the operators held information critical to uncovering the material structure of the telephone network.

Importantly, phreakers viewed the phones as one large computer system that could be radically altered once their mechanisms were known. As John Draper, also

known by pseudonym, Captain Crunch told *Esquire* Magazine in 1971, "I'm learning about a system. The phone company is a System. A computer is a System. Do you understand? If I do what I do, it is only to explore a system. Computers. Systems. That's my bag. The phone company is nothing but a computer" (Draper as quoted in Rosenbaum 2011). Exploring was not limited to dialing, though, as some phreaks sought information by dumpster diving at the offices of the phone company and sometimes searched the garbage of telephone workers (Lapsley 2013a: 241). During this time, it was common to think about people as part of the infrastructure of the telephone system. After all women were part of the computer itself, integrating the circuits and preforming the necessary switching to link callers. During WWII, women were literally the "computers" who performed the calculations necessary to calibrate ballistics equipment (Light 1999). It was in 1945 that the military began making the distinction between computers as machines and humans as operators (Light 1999:

In 1960, an article titled "Signalizing systems for control of telephone switching" published in the Bell System Technical Journal changed the way that phone phreakers methodically approached experimenting with the telephone system. This journal revealed the mechanisms and actual frequencies used by the phone company to engineer telephone connectivity. The first to use this manual to build a machine to mimic the telephone operating system was Ralph Barclay, a student at Washington State University, who discovered the journal as he was browsing at the University library (Lapsley 2013a: 52-54). He was living in a dorm full of engineers

who routinely hardwired the pay phones to make cheap or free calls, so the journal provided a series of work-arounds that led him to build a portable machine that mimicked the calling features of the telephone network. He was arrested one year later for making fraudulent phone calls. However, the device itself was not illegal. Later in 1971 after reading an *Esquire* article on phreaks, Steve Jobs and Steve Wozniak searched high and low through the stacks of the Stanford Linear Accelerator Center for information about telephones and frequencies.

Like Barclay, Wozniak and Jobs discovered that each number dialed on the phone emitted a tone that could be replicated (Lapsley 2013b). By then, others had discovered that you could train yourself to hear these tones and identify the codes used by the telephone company to connect your call. Phreakers would call an operator and record the tones when being patched through to another line, and then later direct dial the phone either by mimicry or by playing tones on a whistle, keyboard, or cassette (Lapsley 2013a: 29). One of the most notable phone phreakers, Joy Bubbles, was a blind man with perfect pitch who could sing the tones (Lapsley 2013a: 328). Less physically gifted phone phreakers learned how to mimic these tones using homemade equipment they called "blue boxes" to make free calls (Lapsley 201a3: 51-55). These boxes mimicked the 2600 Hz tones made by the equipment used by the phone company to connect lines. The use of boxes increased as AT&T automated their systems to support direct dial. Without the need for an operator, phone lines were connected quickly, but were also much easier to manipulate than the human operators.

Sometimes called blue, black, or red boxes depending on their functions, these specialized tools for making free calls were packed full of resistors and capacitors, which made them were very sensitive to calibration. Even the slightest change in temperature could render a box inoperable (Lapsley 2013a: 220). To enhance equipment, phreakers began sharing information about how to build boxes via newsletters, such as the Telephone Electronics Line (TEL) and Youth International Party Line (YIPL was also known as Telephone Assistance Program-TAP).³³ By the 1970s, making free calls was illegal and so was possessing a blue box, but police had to know what it was in order to arrest the possessor. Legality, though, did not stop the founders of Apple, Steven Jobs and Steve Wozniack, from building and selling blue boxes and phone phreaking the Vatican in Rome before they built any Apple computers (Lapsley 2013b). Additionally, phreakers' newsletters emphasized understanding the infrastructure of the telephone system and modifying its intended uses. As blue boxing gained notoriety in the 1970s, phone companies filed injunctions against those who were sharing the information about not just the boxes, but telephone communications itself.

For example, Teletronics Company of America (TCA) began publishing TEL in 1974. It was a newsletter for telephone hobbyists who sought technical information, a forum to ask questions, and to share obscure newspaper clippings about telephones. This newsletter sparked outrage from Pacific Telephone & Telegraph in 1974 when TAC published schematics of how to connect up to four phones into the same line

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³³ The TEL newsletters are collected here: https://archive.org/details/telnewsletter Last accessed 5/20/2015. The Youth International Party Line / TAP archive can be found: http://servv89pn0aj.sn.sourcedns.com/~gbpprorg/2600/TAP/ Last accessed 4/1/2014

along with schematics for constructing blue boxes. The phone company won a judgment against TCA for \$100,000 in damages and a court order to prevent the newsletter from circulating to its subscribers, a prelude to the relationship the music industry would have with file sharing software. Additionally, TCA was required to release their list of 8,000 subscribers to the phone company who sent this notice in the mail (Lapsley 2013a: 241-242):

Dear Telephone User: On March 25, 1976, the Superior Court of California, County of Los Angeles, entered an injunction in favor of The Pacific Telephone and Telegraph Company and against Teletronics Company of America, and others. Your name appeared on a list (provided under Court order) of subscribers, or potential subscribers, to material previously published and distributed by Teletronics Company of America. Accordingly, for your protection and benefit, you are hereby given the following notice: IT IS A VIOLATION OF STATE AND FEDERAL LAW TO USE ANY INSTRUMENT, DEVICE OR SCHEME TO OBTAIN ANY TELEPHONE SERVICE WITHOUT PAYMENT OF THE LAWFUL CHARGES THEREFOR. IT IS ALSO A CRIME TO PROVIDE INFORMATION TO ANY PERSON WHICH IS USEFUL FOR SUCH PURPOSE. IN MANY STATES, THE POSSESSION OF OR DISSEMINATION OF PLANS OR INSTRUCTIONS FOR SUCH DEVICES IS A CRIMINAL OFFENSE. VIOLATIONS OF THESE LAWS ARE VIGOROUSLY INVESTIGATED AND PROSECUTED. ACCORDINGLY, YOU ARE URGED TO DESTROY ANY AND ALL WRITTEN MATERIAL OR DEVICE YOU MAY HAVE WHICH MAY VIOLATE ANY OF THESE LAWS. THIS STATEMENT IS BEING SENT TO YOU BY ORDER OF THE SUPERIOR COURT OF CALIFORNIA, COUNTY OF LOS ANGELES. The Pacific Telephone and Telegraph Company

Figure 4.1 TEL Injunction From the Archive.org Collection

This court order revealed a sharp contrast between phreakers who were curious technophiles exploring the telephone system and the more general public who sought knowledge that they may never even use. There existed not only a legal gulf, but also a knowledge deficit between curious students who had access to institutionalized education and technical manuals, such as tinkerers like Wozniak and Jobs, versus hobbyists who were building with hardware and software at home and needed newsletters as a guide. This separation was also reflected in the "Phone Phreaks Ten Commandments" published in TAP newsletter #86, where number five reads "If thou

be in school, strive to get thine self good grades, for the authorities well know that scholars never break the law."³⁴ While those with access to academic libraries could obtain information about telephone systems, hobbyists had to go further underground, and accordingly their phreaking took on a much more political and radical tone.

Lapsley (2013: 240) attributes the difference not only to "intellectual snobbery," but also to the size of the TCA mailing list. By publishing knowledge of the phreakers, TCA was revealing both the vulnerabilities of the phone company's infrastructure and the contours of the phreaker networks including how they made calls and how to contact other phreakers. Once a phreaker tactic was shared in newsletters, it was no longer useful to the phreaker community itself, either because the phone company intervened or many new people flooded the lines and rendered them useless.

As phones become more automated, phreakers circulated information about direct dialing area codes as well as directions for connecting multiple phone lines to the same conversation. News quickly spread that if more than one person called into a "busy" line at the same time, they could speak to one another, although the annoying busy signal remained (Lapsley 2015: 153). Another technique included calling lines that were out of service. The recorded female voice would echo "sorry, you have reached a number that is disconnected or no longer in service" over and over again, yet an unlimited number of phreakers who called in could shout to each other over this message. Armed with these two methods, the phreaker party line was born.

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³⁴ The entire issue can be read here:

https://web.archive.org/web/20140717163530/http://servv89pn0aj.sn.sourcedns.com/~gbpprorg/2600/T AP/pdf/YIPL_and_TAP_Issues_1-91.99-100.pdf Last accessed 5/20/2015

Importantly, several of the early phreakers who discovered these techniques and formed the base of the emerging phreaker network were young blind teenagers, who sought companionship through the telephone (Rosenbaum 2011). They were dedicated to understanding and discovering the invisible phone network and meticulously documented every open line they could dial (Lapsley 2013a).

Importantly, these early conferences, and not the newsletters, became the substantive space for sharing knowledge about phreaking. As the *Esquire* expose on phreaking described in 1971: "Talking together on a phone hookup, the blind phone phreaks say, is not much different from being there together. Physically, there was nothing more than a two-inch-square wafer of titanium inside a vast machine on Vancouver Island. For the blind kids there meant an exhilarating feeling of being in touch, through a kind of skill and magic which was peculiarly their own" (Rosenbaum 2011). Curiosities, superb senses of hearing, social isolation, and the mystery of the telephone were

While businesses and the government could pay an operator to coordinate and monitor a conference call at very high rates in the 1970s, this tool was not readily available to the public, let alone phreaks. While the entire phone system was held together by manipulatable equipment and operators, it would be a piece of a teletypewriter exchange that provided the platform on which the small network of phreaks could gather. Prior to faxes and email, these machines were built to transfer printed words, at a rate of 45 words per minute, over telephone lines (Lapsley 2013a: 162). Calling into the Vancouver's 604 area code, phreakers discovered that 2111 was an

open line with a continuous buzzing that allowed direct dialing for free. When they no longer heard the busy signal, they believed the line was disconnected. However, it turned out to be an open and quiet line that could support an untold number of callers. They called this the "2111 Conference" and began using pseudonyms to hide their identities in case AT&T was monitoring the line (Rosenbaum 2011). However, the end of the 2111 conference was not due to the phone company discovering the exchange, but rather a change in hardware no longer supported the malfunction of the teletype that the phreakers turned into a feature (Lapsely 2013a: 161-165).

Phreaks eventually found new ways to patch together phone lines and conference calls became the preferred form of communication among the network, even as the internet emerged in the 1980s as a central repository for newsletters, missives, and manifestos. ³⁵ As Jason Scott hacker/phreaker said of phreaker conference calls, "The difference between a two-party call and a telephone conference was like the difference between a Sno-cone [sic] and skiing. And the best part was how sometimes the conference would come to you, unannounced, just you picking up your ringing phone and a dozen people would call out your name and drag you into the never-ending conversation" (Baraniuk 2013). Moreover, phreakers in conversation with one another produced new knowledge of the phone system and allowed phreakers to compare different telephone exchanges and mechanisms. Like the operators of party lines, the phreakers became the central repository of knowledge and information about

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³⁵ Jason Scott maintains a vast collection of these archival materials from Blackboard systems, which can be found here: http://textfiles.com/phreak/ Last accessed 5/20/2015

their community and its needs, especially in times of heightened surveillance by AT&T and the FBI.

Unlike the knowledge of the telephone networks held by operators, knowledge of phreaking was never complete or organized. Rather, it was patched together from what was available in newsletters and through the odd chance you may encounter another phreaker on the phone. Phreaks, who had no knowledge of each other, would routinely discover the same techniques for interfering with tones and generating new equipment to automate the process of dialing and connecting. Phreaking was a continuous practice of discovery. Phreakers innovated with and became more sophisticated as a result of the phone company's attempts to control communication and make talking into a commodity. Whereas the phone company did not care who was called as long as they could bill for the call, phreakers sought to open the lines by understanding the technical specificity of the infrastructure and subverting it, according to them, for fun. As knowledge of phreaking became more ubiquitous, however, criminal groups, like bookies, began using blue boxes in an effort to evade police (Lapsley 2013a: 98).

Many early phreakers took on an apolitical identity by appealing to phreaking as a scientific experiment, but this identity was only available to white college educated male phreaks. There is little evidence that any women participated in the phreaker networks, which is odd given their prominence and control within the telephone network itself. The legality of phreaking was contestable prior to the 1970s because few laws existed to prosecute theft of phone services. Moreover if they were

caught, phone phreaks were often teenagers, some of which were blind. By the 1970s, there were others like Abbie Hoffman, founder of the YIPL, who recognized phreaking as an overt anti-capitalist political act (Hafner and Markoff 1994: 20). Newsletters published by YIPL and TCA became a controversial way to share information across the network of phreakers because they explicitly diagramed how to build boxes and circumvent billing. Yet, arresting teenagers and activists was seen as a bad public relations strategy for AT&T, who was after those who were profiting off phone fraud.

AT&T wanted a more publicly suitable target for its campaign against phreaking that would draw the interest of the FBI. As knowledge about blue boxes became mainstream, AT&T went after notorious criminal targets in order to get laws against blue boxes made more quickly (Lapsely 2013a). Bookies and gamblers were unsympathetic characters who used blue boxes in order to hide their identities and make free calls. In one of the largest phone surveillance projects ever carried out, AT&T recorded between 1.5 and 1.8 million calls from 1964-1970 in order to detect the rate of fraud and find suspects worthy of prosecution (Lapsley 2013a: 94). While phreakers remained dedicated to exploring the infrastructure of the telephone network, old techniques like whistling and using boxes were either obsolete or too risky by the mid-1980s.

The capacities of the telephone network were both visible and invisible to users and the phone company. Everyone could see telephone wires spread across the landscape and understood that they connected strangers, families, communities, and

even governments. But, phreakers sought out the invisible infrastructure of how voices travelled, how the numbering system worked, and how to move through the network undetected by operators and billing. There was a fair amount of pranking involved too. Conference calls became a staple early on in these phreaker groups who were experimenting in this distributed computer spreading across the US because expanding the capacity of the lines were a central aspect of the phreaker practice. Moreover, phreakers were a network, not a movement. The rediscovery of the party line as conference calls resembled the work of early telephone operators as conference moderators dialed in participants from all over the world and kicked them off the line if necessary. Like the operators, phreaking required a sophisticated understanding of telephone networks as well as access to hardware in order to meet the desires of the users. Both the actions of the phone company and the tactics of the phreakers mutually reinforced innovation and produced ethical quandaries about knowledge of telecoms and the commodification of communication. In many ways, the history of the internet is born from the same desires of phreakers to expand the communication capacities of groups, but still runs up against the costs, both financial and political, of doing so.

Conference Calling across the Occupy Movement

The operation of a party line resonates with the practices of InterOccupy volunteers who managed the technical interface, called Maestro Conference, of large conference calls. Maestro Conference is a hybrid technology born out of the technological synthesis of radio, phone, and internet and is a propriety platform that

connects up to 500 telephone lines. However unlike social media platforms that capitalize on the speed and abundance of information, Maestro Conference was built with the intent purpose of supporting coordination and connectivity of actors in real time. The commitment of the InterOccupy volunteer operating the conference call is a form of information labor and is corollary to the work of telephone operators at the switchboard in the early 1900s. Telephone operators spent their workday linking together people, often listening to many conversations in order to know when to hang up, and answering questions from the community they served. When an InterOccupy volunteer was managing a call, it was an all-encompassing physical task that requires full attention, technical and manual dexterity, and knowledge of the values of the movement.

Critically, it was not simply that people in New York were seeking to reach out to the rest of the movement, but that many people in different locations were forging connections in numerous ways all at the same time. In Philadelphia, the General Assembly posted an online communique that read:

Most importantly, we intend for this message to establish a precedent of direct assembly-to-assembly correspondence, which we believe should be the primary means through which this movement mobilizes and communicates. We can only unite, grow, and move forward together if we proceed with complete transparency and openness, as well as a firm commitment to direct democracy.

In Los Angeles, I travelled weekly between encampments in Los Angeles,
Long Beach, San Diego and Irvine to establish connections and build a regional email
list. Others were hosting discussions on message boards, such as Occupy café. Social
media platforms, like Facebook, YouTube, and Twitter, as well as the website

OccupyTogether, were the primary means of communicating across distances.

However, what InterOccupy endeavored to accomplish was different. The goal was to channel the culture of the Occupy movement into a more cohesive and coordinated network of networks. The conference call was the crucial conduit for achieving this goal because it offered voice-to-voice real time discussions and fostered an atmosphere of trust when state violence against Occupy protesters was at its peak.

The first InterOccupy conference call occurred on October 24, 2011 and consisted of hundreds of people on lines connected from as far away as Hawaii and Italy. Leading up to the call, Occupy protesters in New York held a series of meetings to discuss how to facilitate the call in such a way that New York City was not the center of attention and how to respect diversity of location, class, race, sexuality and gender. Similar to the concerns of customers and operators on the party lines, no one really knew how to convey these differences over the phone, especially in respect to race. Tammy, an organizer with OWS as part of the Movement Building Working Group, described the pre-call meeting:

So, we have this meeting, and there was someone there from Harrisburg or somewhere in Virginia. So, we decided the facilitator for the next night would be me, and her, and Ethan. Ohh, and George. That was a really good mix, because George is black, and this woman was from Harrisburg, and there was me. So, it was a good conversation of races and diversity, even though no one knew what the diversity of us was on the phone; but we were really concerned about that. We were excited to have someone to facilitate that wasn't from New York. We were so anxious about this 'being from New York' thing. Then, Michael Badger was going to do tech.

Badger, a gay man, was a central participant in the InterOccupy project. He began attending the Occupy protests in New York City very early on and his contributions

included offering coaching and orientation services for those new to the movement as well as donating his Maestro account for the first few conference calls before

InterOccupy received its own account.

The first conference call was held in a private office near Wall Street. On the night of the call, sixteen people showed up to the Manhattan office to be part of the action. The office itself bore the marks of class, as Tammy explained:

This space was this two-story space off of Broadway, right by Wall Street. That was really high up, and that was somebody's office with a bunch of cubicles. I don't know what they did there. Probably some sort of tech thing. It was real bright orange, and blue, and super fancy. After we had the meeting, we were all just lounging around in peoples' work chairs. It was really funny—like, what are we doing here? What is this space? It was super-fancy and really high up. There was a porch you can go out on that looked all over Manhattan.

Moreover, by conducting the call offsite, only those who knew the location could attend the call in person. Importantly, the call was situated differently in each location. For example, in Los Angeles two of us called in from a tent near the evening's General Assembly meeting. We hooked my BlackBerry phone into a pair of computer speakers and huddled together in order to hear what was being said. While anyone else could have joined, very few in Los Angeles were interested in conversing with other encampments initially. Some cited that they wanted to focus on local organizing and believed a project to, in their words, "nationalize" the movement was dangerous to the autonomy of smaller groups.

The opening of the conference call and overall experience was utterly chaotic. It began with a single question, "Is anyone on the call?" from a voice I would later come to recognize as Tammy. Then, there was a cacophony of voices, presumably

from all over Occupied America, when someone says loudly, "You are going to use mute, right?" In totality, there were ninety callers, but some lines contained groups of listeners. There is no way to tell definitively how many people were actually connected, but over forty different locations reported attending, some with up to thirty people on a single phone line in the same room. Some callers did not report who they were or where they were located.

Tammy followed up her query with another, "You guys can hear me, right?" and a booming echo of voices says, "Yeah." "Yes!" and "You need to mute people!" Instantly, I felt transported out of the park at Occupy Los Angeles and into a dark tunnel in a busy train station. I could hear everything, but the muddled chorus rendered few words intelligible. Badger described his experience providing technical assistance, "Personally I just remember just this feeling of wow, something's really happening here. And there was just this -- to me, that was my first like almost bodily feeling of solidarity was that first call."

The first question on the call was from Occupy Austin and concerned opening a chat room online while the call was happening. The facilitators offered an ad hoc solution, which was to access a shared Google Doc, where notes were taken about the call. At Occupy Los Angeles, we had access to computers and WiFi, but the decision to use the chat function within a Google Doc was a disaster because only a limited number of people could view it at the same time. Moreover, in order to get the link for the Google Doc, participants had to access it through a Twitter account of one of the call facilitators. The second question was regarding using Skype to listen to the

conference because the participant did not want to pay for the call. Skype, like phone providers, charges a fee to make phone calls, but provides video and audio chat for free. There was no way to use a "free" Skype account to hear the call unless someone else who was called in offered to broadcast it over Skype. It was becoming apparent very quickly that a solution was needed to patch people into the conference from their preferred communication platforms. The first five minutes of this conference call reflected the challenges that lay ahead for InterOccupy as the limits of connecting between platforms were learned through trial and error, where every subsequent conference call opened new possibilities for streamlining the process of coordination based on the knowledge of the facilitators and participants.

As telephone operators became an indispensable source of trusted information in the 1900s, Bell eventually monetized this informational labor as "411." Because InterOccupy became a conduit through which many pieces of information flowed, the role of the call facilitator and technical assistant grew into brokers of verifiable and trusted knowledge about the movement akin to 411 operators. It was a combination of the technical expertise needed to operate machines, matched with the content of the conversations, that gave both telephone operators and InterOccupy volunteers power throughout the network. Critically, the daily tasks and information labor of InterOccupy fell on women, the unemployed, and underemployed. This pattern reflects the demographics of the party line operators and subscribers who animated the telephone lines and gave a voice to the technology.

While McLuhan was talking about one on one telephone connections, the issue of authority through knowledge is exacerbated on conference calls. On InterOccupy calls, those with the most information tend to talk more and repeatedly correct others regardless of any formalized rank in society. Others tried to insert rankings into the conference call by signing up as "Dr." or "Mr." but rarely did these distinctions matter as only the InterOccupy volunteer using the Maestro software can see the distinctions.

Importantly, InterOccupy began phreaking Maestro Conference to explore its capabilities and understand its limits. While the internet extends communication across countries, voice communication was still difficult for a variety of reasons including language barriers and time zone differences. After overcoming these obstacles, the monetary cost of making calls remained high. InterOccupy took certain measures to patch in long distance callers. Because Maestro conference used phone lines, long distance calling was a unique challenge facing occupiers, who like the phreaks sought to free the lines of communication. This puzzle was solved by linking lines together over other voice-over-internet applications, like Mumble, Skype or Google hangout, into an American phone line that is connected to the conference call. When done effectively, up to twelve people from other nations shared the same line into a conference call. Like the old lines though, the sound quality degraded rapidly and it relegated many of these international participants to listening unless efforts were made in advance to secure a single line.

As well, IO needed to leverage all mediums of communication to get people on the phone. This included registering social media accounts, forming alliances with

other social media administrators, and promoting calls on email lists, websites, and by making announcements at local assemblies. Because it is not obvious to many that different groups of people administrate each social media account and website, there is an assumption that cooperation occurs spontaneously, which is not usually the case. Coordination depends on trust and legitimacy of the source of information and usually requires a significant amount of outreach through other channels like email, text messaging, or phone calls. InterOccupy began to operate as a virtual organization with procedures for bringing onboard new volunteers, so that trust remained within the network. InterOccupy took seriously the task of maintaining the integrity of the communication network even as the Occupy Movement began to wither.

In the fall of 2012, a large storm, hurricane Sandy, washed away much of the coasts in New Jersey and New York. InterOccupy activated all of their skills to respond to the crisis alongside other Occupy protesters under the banner of #Occupy Sandy. Occupy Sandy showed that InterOccupy was not only a platform that could move information, it could also move goods and people. Whereas phreakers tinkered for the sake of knowledge, participants in InterOccupy used the knowledge of operating the InterOccupy platform as a way to launch mutual aid services that rivaled FEMA and the Red Cross.

Conclusion

From party lines to those early phreaker telephone conferences, the history of teleconferencing is a story of anonymity, subversion, and coordination. Looking at

InterOccupy as part of the history of telecommunication infrastructure reveals the privacy we never knew we had and anonymity we never knew we needed. In the same way that the phreakers explored telephone infrastructure, computers hackers eventually went on to explore not just the contours of cyberspace, but also the community that jacks in. While the internet allows users and communications to be displaced in both time and space, InterOccupy emphasizes connecting voice to voice communication, which centers the community in different ways and offers other possibilities for organizing campaigns and coordinating distributed direct action.

Tethering InterOccupy to the history of phreaking and telephone operators illustrates how InterOccupy matched the tools of the operators to bring many voices together with the ethics of phreakers to open lines of communication across socially isolated groups. When the Occupy camps were demolished by city officials and police officers, InterOccupy provided a vital place for protesters to gather and say, "Hello? Can you hear me now?"

CHAPTER FIVE

"Our Process is our Message"

Throughout the rest of this dissertation, I map the relationship between the information milieu of protesting and the ways InterOccupy developed infrastructure from October 2011 through November 2014. Importantly, the history of InterOccupy is marked by three distinct phases: first, InterOccupy modeled the structure of communication channels between encampments on the general assembly process of those camps, which I describe in this chapter. In chapter 6, I illustrate how the police oppression of the movement scattered protesters across different spaces, which led to confusion and disorganization. In chapter 7, I describe the second phase, where I detail how InterOccupy developed, tested, and redesigned a communication infrastructure nationally. As participation stalled across the movement in the early fall of 2012, the networks InterOccupy struggled to connect were participating less and less on the platform. In the final chapter, I move on to the third phase of the transformation of #OccupyWallStreet to #OccupySandy. At the end of October 2012 as Superstorm Sandy gathered momentum, so too did InterOccupy organizers who were ready to reanimate the network. Responding to the ecological crisis required a concerted effort by a large network of distributed volunteers who were already familiar with working across multiple digital platforms.

From Leaderless to Leader-full

InterOccupy began as an interactive space for activists looking to organize across the Occupy Movement. By October 2011, the Occupy Movement in the U.S. was in full swing with hundreds of encampments spread across the globe. The need for a robust communication network became apparent when camps had trouble contacting one another in order to share important information about police suppression.

Contacting other camps via email, Twitter, or Facebook was failing to provide the kinds of connection and dialogue necessary to sustain the movement during periods of intense conflict with city governments. Early on, I travelled between camps in LA, San Diego, Irvine, and Long Beach to develop a contact list and start to build bridges of communication across southern California. Others in different regions were doing similar things, but there was no overarching plan or infrastructure to connect these efforts.

Organizing these disparate nodes one at a time was insufficient if the goal was to organize any widespread, coordinated action, or inform the whole movement of emergencies. While there were already online groups dedicated to providing a space for Occupy activists to talk, such as Occupy Café, these spaces did not cross-pollenate with hard grounders (people who stayed and camped nearly every night). A plan was needed to bring the encampments together in a way that allowed for dialogue and information sharing that would result in mobilization across the space of flows and within the space of places.

In this section, I describe how InterOccupy came together and the events that compelled the group to embrace a structure and process similar to what was used in Occupy encampments. Critically, the vision and purpose of InterOccupy was tethered to the organizers' experiences in the camps. Where possible, I show how the experiences of the camps were either directly adopted by InterOccupy or used as cautionary examples of what practices should be avoided in order to maintain the integrity of the network-making project. The adoption of Maestro Conference calling, a technology that was flexible enough to facilitate communication across 500 phone lines, supported this network-making activity. As with the encampments, competition between different groups seeking to make strategic alliances within the movement, created a situation in which groups had to make decisions about their identity and purpose quickly in order to establish communication power across the local and national networks. From here, I describe the kind of network of networks InterOccupy envisioned, as Committees of Correspondence, and the steps taken to implement this design. Additionally, I describe the gatekeeping work of InterOccupy that both opened lines of communication between encampments, but sought to close down any attempts to represent the movement nationally. Lastly, I show how the network of networks model used by InterOccupy lead to a national day of action to shut down the west coast ports in mid-December 2011 and how this successful coordination of a distributed direct action provided a model for organizing the movement after the camps were raided.

Members of the Movement Building Working Group at Occupy Wall Street decided to hold an open conference call on October 24, 2011 so that occupiers could share reports from their camps. In order to connect to the camps, members of the Movement Building group visited many Occupy websites and sent emails to those who listed contact information. As part of Occupy LA, I received this email at 1pm on 10/24/2015:

Hello,

Some folk from the OWS occupation at Liberty Plaza have begun thinking about strategies, goals and reasons for coordination and communication between the occupations nationwide. We'd love to invite your occupation to a conference call, Monday, October 24th, 10pm EST/7pm PST to meet, cross-pollinate and begin this process together.

Details about the conference call can be found here: http://bit.ly/qbymfR There's room for 60 phone lines to join the call. We'd really love it if, if multiple people from the same occupation want to call in, you could do so on one phone line, leaving room for as many voices to join the conversation as possible.

Our apologies for the lateness of this invitation. We get kind of busy around here, but that's no excuse for shoddy organizing. Feel free to forward this invite on to others in your occupation/bioregion/state. We haven't been able to gather e-mail contacts for all the occupations at all, and would love your help in spreading the word.

Also, please direct replies to; movementbuildingNY@gmail.com

In solidarity, OWS

This message was also posted on various Facebook pages and linked in Twitter feeds.

Later that evening, several people at Occupy LA called in and participated in the first conference call across Occupy camps. Many themes were brought up on the first call

including the need for strong communication channels to unite the movement and a way to share resources across sites. At the conclusion of the call, Badger asked for those who wanted to plan the next conference call to contact the Movement Building Committee in New York. The next day I sent this email:

Hi,

This is Joan with OccLA. I was very excited to see that OWS had arranged a conference call and it was nice to hear people air their concerns. [...]

There are some dangers in establishing inter-occupation communication though and we must be mindful of this. For example, we as communicators do not 'represent' our occupation. We should establish a code of conduct for going to sites who are 'in need' because we don't want to efface their consensus making process or be seen as defacto leaders. This problem arose between OccLA and OccLB when some people from LA went to aid LB during a police altercation. Members of LA were arrested, but worse, these LA occupiers disrespected the LB occupiers by not standing in solidarity with the decisions they had made during GA earlier that night. As well, 'agents' have been pretending to be from OWS in both SD and SF and claim things like "OWS is sending 5000 people over to help" etc. They use the status of OWS to gain trust and then try to get occupiers to make decisions without gaining consensus.

As they become established, occupations must learn to solve their own problems and plant their own roots. They do this by developing autonomously for the most part. If we as communicators do make recommendations or give advice, we must be careful of the time and place where we give that advice. For example, it should not be our role to re-structure their GA or tell them how to run their committees. All of this is an experiment in democracy and we ought to let these little laboratories test their hypotheses.

Just from travelling between 4 occupation sites, I can see that the differences between them will have something awesome to teach the rest of us in time. For now, we should concentrate our efforts on mining data so that we can better see and articulate these differences. At this point, no one should feel as if they are "doing it wrong" or "should listen to a leader." Making our occupations work for each community is the process by which we learn to become leaders and find our niche.

That being said, I do think that if we listen before we talk and understand before we recommend, then communicators can become effective systems of support. This can only be accomplished by the patient reflection on what we are already doing and how we can optimize the knowledge gained by trying out new forms of democracy. We also shouldn't be too quick to 'solidify' our movement towards a concerted end, as it will alienate those who are just finding their voice for the first time. There are global, national, and local concerns to be attended to and the point of the localization of occupations is to begin that dialogue on how these concerns are connected to one another.

All the best, Joan

The following Thursday (10/27/2011), another call was held with several volunteers eager to take up the challenge of convening the next large-scale conference. This small group was later to be known as the "Call Planning Team." During this first meeting, we took turns introducing ourselves. It was quickly evident that each of us spent time travelling between other camps looking to network the movement across greater distances. For example, Brandi in Colorado introduced herself:

I have been really active in Denver when that started. But now, I've gone up north to help out with the smaller occupations in northern Colorado, and I have gone to a couple others. I've gone to DC to see how they've organized, and trying to network. Then, I'm going to New Orleans next month.

I found myself telling a similar introductory story, as did other participants who talked of travelling to other locations or conducting outreach through social media. Although it makes sense that those reaching out across encampments would eventually come to find one another, none of us predicted that we would come together this way. As we continued to chat, it became obvious why conference calls were filling the gap where

email was failing. Ash, a musician and Occupy protester from Philadelphia, put it this way:

The one problem that we are finding in Philadelphia is that when it comes to list serves and email lists, it has a multiply effect. It seems that it just compounds every day more and more and more. The more people you get involved on an email list, they want to reply and the message just becomes unintelligible. It is crazy the amount of time any one of spends going through email.

He went on:

From my prospective, the most important thing to me is putting in an infrastructure to begin between the groups. And again, this may be putting the cart in front of the horse, but whether it's an email list, a master email list, or some other medium. I think what's most important to identify how we are going to communicate with the tension between an open, democratic process and a democratic protocol that they could try to get everybody to voluntarily adhere to. Philadelphia has our ideas, and we would love to express them, too. But, again, my particular concern would just be to address the 'how' of the 'why' that we are all familiar with.

This sparked several responses on how to structure communication across the movement. Would it be better to build a website like Facebook to connect general assemblies or to hold both regional and national conference calls? Is it a good idea to form a national committee to organize strategies across the movement? What should be done with the list of email addresses generated by the first Monday night call? Should we use that email list for announcements only or should everyone on the list be able to respond? If we did use email lists, how could we ensure they would be useful and not get bogged down by personal conversation? The visioning stopped abruptly as one participant initiated a "point of process," asking to return to the agenda, which

was to plan the next conference call. Badger spoke up to say that the first point on the agenda is to discuss what to do with the email list from Monday night.

At this point Tammy, an Occupy activist in New York City with prior experience organizing networks, told the group her thoughts about the email list as well as an interaction she had with another organizer, she stated:

There's a lot of questions about how we can actually make an email list open source in a way that it should be open source for anyone can join and anyone can communicate. That doesn't become an email list that's totally overwhelming that none of us can actually follow, because there's 5,000 people on it, and therefore it defeats the purpose of the list in the first place. We weren't exactly sure how to deal with this dilemma. At the same time, we felt like it was important to keep having these phone calls, and we need list of some sort in order to announce them. So, we are sort of in a challenging spot. I proposed a solution so that we would have an email list that would only be used for the purpose of announcing these conference calls, and send everyone a link to the forum where anyone could join, where a free-flowing conversation could happen. In the forum, you have to go to it, as opposed to it having to go to you, and that way, it's not intense and overwhelming in an email. That was sort of the proposed solution.

She continued:

There's another piece of information that I think I need to share at this time, and I apologize if it derails the conversation. But there's another national call that was happening, and the people who were organizing that call were interested in joining forces with us, so that we are all talking to each other. It seems like they have people in places where we don't, and we have people in places where they don't, so it's a good combination. They also have a group of about 30 people who are interested in being in some sort of national facilitation committee, which is, I guess, exactly what we are doing here. They were happy to send us the email for that call, but not if we sent them the emails to our call, which sort of leaves me in a tricky spot. I'm not exactly sure what to do.

Tammy's interjection raised many questions and discussion went on for nearly two hours. The main point of contention had to do with how to best use email lists, given

their tendency to be weighed down by conversation, with the desires of other groups to facilitate communication across the movement. The issue hinged on the fact that the person who spoke with Tammy said that he no longer wanted to do conference calls and would hand over his list of participants, but also wanted our list in trade. This struck all of us as an odd transaction. If he was no longer going to be working in this capacity, why did he need our list? After much debate, the solution was for Tammy to continue discussion of sharing email lists with this other group, while also uncovering their motives.

More to the point though, the formation of an outsider versus insider dynamic developed very quickly after this information was shared. The email list was transformed from a tool to be used to disseminate information across the group into a resource to be protected. I found myself wondering what forms of co-option were possible when lines of communication were formalized across camps. Another participant stated:

I think that some of the power of this movement is that it is not a united movement. It is a reverse nodule, multi-dimensional type of movement. So, I think that there will become point of power--not point of power unification, but communication unification that will happen.

This point about "communication unification" presaged the ways that InterOccupy would come together as a group based inside infrastructure. The competition from Occupy Coordination, who was also making national calls, forced the Call Planning Team to consider not just email lists as a resource, but time management as well. For example, in order to ensure openness and participation, the Call Planning Team struggled to develop a participatory agenda building system, where each call's content

was agreed upon at the outset of the discussion. We also had to decide if it was appropriate to allow representatives from Occupy Coordination to make announcements and promote their channels of communication on the Monday night calls.

Over the next two weeks, this debate would stream through numerous conference calls, emails, text messages, and personal phone calls between the Call Planning Team. Talking about the motivations, structure, and agendas on Occupy Coordination calls solidified our own identity in many ways including the desire to speak between and not for Occupy camps. By November 5, 2011, a series of emails about what to name our group was sparked by a discussion that happened on the competing conference call. The other group had come up with five options to name their group: Occupy for Humanity, Occupy Outreach, Occupy Leadership, Occupy Coordination, and Occupy Conversation. Their use of the term "leadership" raised the hackles of those who were leery of others' attempts to use the movement for personal and political gain. In a Statement of Autonomy, OWS describes itself, they stated, "Occupy Wall Street is a people's movement. It is party-less, leaderless, by the people and for the people."³⁶ As a result, the suggestion of the name "Occupy Leadership" stirred paranoia that those hosting this call were detached from the movement itself. On 11/5/2011 after a long email thread, InterOccupy decided to stop calling Monday night general call "a national call." We did not want to be seen as stewards of a national movement.

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³⁶ This quote is taken from the NYCGA's Statement of Autonomy: http://www.nycga.net/resources/documents/statement-of-autonomy/ Last accessed 5/20/2015

On Nov 7, 2011, accusations and distrust marred a conference call between Occupy Coordination and InterOccupy. InterOccupy dug in its heels against the generation of national working groups that could speak for the movement. One member of Occupy Coordination accused InterOccupy of acting in bad faith. Due to personal and communication differences, it was obvious the groups were not going to be able to work together. This call was an important moment for InterOccupy because it solidified InterOccupy's mission of GA-to-GA communication, as well as provided us with one new volunteer Jackrabbit, who was working with Occupy Coordination but was also curious about InterOccupy. He describes the difference between these groups here:

The reason that there wasn't cooperation was because, you know, like I said, [name redacted of Occupy Coordination member] had his agenda, It was very specific and it was to further his particular end. Like he had a goal in mind, that was his goal and his idea and he was going to kind of -- he brought these people together to kind of like facilitate his idea and his vision of what -- how he wanted things to happen.

In terms of an agenda, Jackrabbit was referring to the mission of Occupy Coordination, which read:³⁷

Occupy Coordination's mission is to serve the Occupy Movement's efforts to form a more perfect representative government. To pursue the constitutional goals of an America by the people, of the people, and for the people. An America operating with integrity; representing all Americans equally and justly, regardless of income, and ending the tyranny and oppression of moneyed interests. Occupy Coordination recognizes the value of and promotes National/International collaboration.

³⁷ Mission Statement taken from: http://www.occupycoordination.com/about-2/mission-statement Last accessed 5/20/2015

In a way, Occupy Coordination was working towards the goals set out for the Occupy Movement by Adbusters, who called for a constitutional convention to get money out of politics back in July 2011. It was now nearly two months into the occupation of Zuccotti Park though and much had changed, especially the NYCGA widely rejected faith in the current political system. It was by this point that the Occupy movement had developed a collective identity, as "Occupiers," who sought to have their own voice and rejected representation by others. In the NYCGA's Statement of Autonomy, they declared, "Speak with us, not for us." 38

Jackrabbit goes on to describe the different strategy of InterOccupy, he stated:

InterOccupy was basically -- the idea was nothing more than to really facilitate the creation of a communication network that allowed Occupy to talk to itself, essentially. But it was very -- it was really very different. There were two very, very different ends that had very little in common actually. And so, there was really no way that there was going to be any kind of cooperation or coordination between the two groups. There was a lot of animosity.

Instead of building a national movement in order to ask for a redress of grievances by the government, InterOccupy's goal was to network the networks. Over the course of the next few days, members of InterOccupy registered the domain name www.interoccupy.org (it would later be changed to .net), and listed a call calendar, upcoming actions by city, and recordings/notes from previous calls.

The question of leadership played out at every camp I visited. At Occupy LA, the idea that the camp was leaderless propagated for the first few weeks. As people became more familiar with one another, including their backgrounds and motivations,

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³⁸ For the entire statement, see: http://www.nycga.net/resources/documents/statement-of-autonomy/ Jackrabbit was the first to comment on this post, where he wrote: "Fuck. Yeah." Last accessed 5/20/2015

accusations that some participants sought to lead the movement surfaced. Some believed that the unions were taking too active a role in managing the relationship of the camp with the city and the police. In negotiating with the city, unions were gaining favor for workers' issues through leveraging the actions of the encampment. In this sense, unions were able to maintain their own organizational identity, but also align with the actions of the movement and support initiatives selectively. Rumors circulated that some were using the movement to gain fame and fortune by positioning themselves in front of the local media and hording social media accounts in order to promote themselves and their businesses.

In order to avoid letting one person or group obtain too much power and to ensure that decisions were collective, the structure and process of a general assembly (GA) was adopted across the movement. Therefore while some acted independently outside of the GA, the rhetoric of being a 'leaderless' movement stemmed from the adoption of this model, where power was distributed across groups and collective decisions were made after lengthy discussions. InterOccupy later adopted this model for the structure and process of its calls, a point I will return to after describing how GA's functioned in the camps.

The GA model of communication is a "hub and spoke" system. At Occupy LA, the GA was a meeting held every evening for the entire camp (hub). While anyone who showed up to the GA could vote on proposals equally, priority of speaking roles was given to a series of committees (spokes) formed by the GA to deal with specific issues. Like OWS in NYC, Occupy LA was structured around the principle of direct

participation through committees. The GA was the highest body of the organization and reached consensus on proposals raised by committees, affinity groups, and individuals. The GA sought to be inclusive of all people and initially recognized dissenting voices as opportunities for dialogue and growth.

Committees formed to address the needs and desires of members and to focus on a specific set of objectives to reach these ends. Committees made announcements and proposals during the daily GA to update members on their accomplishments and future directions. The GA also heard updates and proposals from affinity groups and individuals. The main difference between a committee and affinity group was that committees were officially sanctioned by the GA, while affinity groups did not require endorsement from the GA to carry out actions or make statements. Affinity groups and individuals' participation was vital for the identification of emergent concerns and for taking quick action when the GA could not reach consensus.

Occupy LA recognized the following committees: action, civic liaison, civic engagement, coordination, calendar, arts and education, finance, food, facilitation, legal, livestream, logistics, production, media (video, web, social and print), medical, objectives/demands, public relations, outreach, occupation communication, peacekeepers, social services, transportation, welcoming and accessibility, and zerowaste sanitation. The following affinity groups also formed in the encampment: Indigenous Affinity Group, Occupy the Hood, Occupy Colleges, Occupy LA Action Assembly, Occupiers for Animals, Queer Affinity Group, Women and Allies Group (Kid's Village) and Occupy Fights Foreclosures.

In many ways, Occupy LA functioned as a small society with a commons established in many public spheres, including:

- Art (individual installations, print lab)
- Banking and Economic Accountability (finance committee)
- Childcare (kid's village)
- Community Concerns (queer affinity group, occupy the hood, women and allies group, indigenous committee, occupy colleges)
- Community Awareness of the Occupation Movement (outreach committee)
- Culture (arts and education committee, production team, chess affinity group)
- Direct Participatory Self-Governance (General Assembly)
- Education (OLA People's Collective University, free library)
- Free Press (social media, print media, public relations committee, LiveStream)
- Health (traditional western medicine, complementary and alternative medicine)
- Political and Social Action (civic engagement committee, actions committee, objectives/demands)
- Open Source Communication Research and Development (web team, occupation communication)
- Organization of General Assembly, committees, and the encampment
 (committee, coordination team, facilitation committee, keeping it real party)
- Resources (the distribution of tents, blankets, clothing, other items)
- Safety (peacekeepers group)
- Sanitation and Recycling (zero-waste committee)

- Sustenance (food committee, community garden)
- Sustainable science and energy (Occupy Green Now Group)
- Transportation (community bicycles)

Importantly, people were free to enter and leave any group or committee of their own volition. No individual held the privilege to represent the assembly, nor could any person or group form a committee without the consent of the GA. Because of the wide range of groups available to everyone, it was difficult (but not impossible) for power to concentrate in any one committee. There was no formal process for removing members from committees or from the GA. This became a hardship as those who desired to disrupt meetings could do so very easily. Early on, disrupters figured out that they only needed show up and disagree in order to derail a meeting.

All members were expected follow the procedural rules set forth by the committee during meetings. This structure, put in place at a series of meetings from September 23- October 1, 2011, grew as new groups formed. The process of communicating at the GA and in meetings took some time to develop, as many were unfamiliar with the format of reaching consensus as well as the series of hand signals used to vote on proposals.

The process of communication used at Occupy LA was adopted from the New York City General Assembly (NYCGA), which provided many resources on their website that illustrated their communication mechanisms and decision-making process, the NYCGA write: ³⁹

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 $^{^{39}}$ Text available at: http://www.nycga.net/wp-content/uploads/2011/10/occupy.pdf Last accessed 5/20/2015

The General Assembly is a gathering of people committed to making decisions based upon a collective agreement or "consensus." There is no single leader or governing body of the General Assembly — everyone's voice is equal. Anyone is free to propose an idea or express an opinion as part of the General Assembly. Each proposal follows the same basic format —an individual shares what is being proposed, why it is being proposed, and, if there is enough agreement, how it can be carried out. The Assembly will express its opinion for each proposal through a series of hand gestures (see next panel). If there is positive consensus for a proposal —meaning no outright opposition — then it is accepted and direct action begins. If there is not consensus, the responsible group or individual is asked to revise the proposal and submit again at the following General Assembly until a majority consensus is achieved.

The NYCGA used these hand signals to vote on proposals:⁴⁰

Table 5.1 Hand Signals of The Occupy Movement

Agree	Description: Hold your hands up, palm open, and fan your fingers back and forth. Meaning: You agree with the proposal or like what you are hearing. [Also known as "twinkling"]
Disagree	Description: Hold your hand downward and fan your fingers back and forth. Meaning: You disagree with the proposal or dislike what you are hearing. [Also known as "down twinkling"]

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⁴⁰ Text and drawings available here: http://www.nycga.net/wp-content/uploads/2011/10/occupy.pdf Last accessed 5/20/2015

Table 5.1 Hand Signals of The Occupy Movement, Continued

	Description: Hold your hand flat and fan your
	fingers up and down. Meaning: You're taking a
Neutral	neutral stance on the proposal.
	Description: Curl your hand and fingers into a
	letter-C shape. Meaning: You either have or
Clarification	need clarifying information.
D	Description: Raise your index finger up.
	Meaning: You have information pertinent to the
) \(\Psi\)	discussion (not for opinions).
Information	
// \	Description: Make a triangular shape with your
	hand by joining your index fingers and thumbs.
52	Meaning: Telling the group the process by
Process	which discussions are held is not being followed.
	Description: Cross your arms in front of your
	chest to form an X. Meaning: You have very
	strong moral or ethical reservations about the
Block	proposal and will consider leaving the group if it
	passes. [Also known as a "hard block"]

For the most part, Occupy LA's GA adopted this same structure with modifications implemented over time. One initial difference stemmed from the involvement of a long-time Angeleno who was in Madrid during 15M the previous spring. He became a fixture of the OLAGA Facilitation Committee. Instead of using the "down twinkle" gesture to disagree with proposals, he suggested waving a hand in front of your face to signal, "I don't see it." This hand signal was used extensively across Occupy LA to show opposition with a proposal or someone's ideas. As well during the daily meetings, committees adopted the same style of proposals and consensus decision-making through hand signals. Consensus initially meant that there were no hard blocks on a proposal. On October 31, 2011 as more people with differing views joined the occupation, consensus was modified to accept some hard blocks on proposals if 90.9% of the occupation agreed.

While this structure prescribes how people *should* interact in the GA and during meetings, it does not address how discussions were carried out in actuality or how those making proposals gained an informal consensus across the camp prior to the GA. In order to facilitate discussion during committee meetings, each meeting would have a note taker, a facilitator, and someone devoted to keeping "stack" - the list of people who wish to speak. This mimicked the administration of the GA, with the exception that GA usually had at least two members in each position. For most committees, each meeting usually began by reading the notes from the day prior and talking about adding items to an agenda. Once the agenda was formed, each topic would be discussed at length until a resolution was reached within the committee.

Sometimes this would mean that an individual wanted the committee to make a certain proposal to GA and the committee would help either write it or discuss why they disagreed. If an idea could not get through committee, it was commonly accepted that the GA would block it. Nevertheless, that individual could still bring his or her proposal to the GA without the committee endorsement. Other discussions centered on adopting new procedures for meetings to define the purpose and scope of the committee and form sub-committees, if necessary. At the GA, committees would make announcements, report-backs, and submit proposals for endorsement. The proposer could tag their action, event, or statement as part of "Occupy LA" once the GA reached consensus.

Affinity groups, though, functioned much more loosely. They would update the GA on their meeting times, announce actions, or make statements, but only after official committees finished. This created a lot of tension between committees and affinity groups as time management during GAs was notoriously poor. It resulted in foregoing announcements in favor of voting on proposals. Affinity groups suffered the most restrictions in terms of time to speak at the GAs.

A few individuals, who spoke frequently at GA and in committee meetings, held more influence over the group, which increased over time. To have their questions answered, newcomers were directed to speak with those who were most visible and most vocal. Particularly in times of crisis, attention shifted to the Actions Committee, which was tasked with planning and proposing direct actions for Occupy LA. Over time, those who consistently facilitated the Actions Committee meetings

came under scrutiny by those who opposed their leadership in determining the actions of the camp. A similar set of character assassinations occurred against prominent members in the Media Committee. Factions began to form and small groups struggled over the kinds and purpose of actions the camp would take, as well as how those actions would be communicated to the outside world. As a result, the GA's Facilitation Committee became a site of this struggle as those who were feuding used the GA as a place to air their grievances (Terranova and Donovan 2013). Interpersonal dramas played out publicly and the audience participated by signaling their support or distrust of members, not only in hand gestures, but also through yelling and disruption.

By way of an example, I show how consensus was reached on topics by adhering to structure and procedure. If questions related to a proposal arose and the process was undermined in any way, the content of the proposal was reduced to a secondary issue. This was especially pertinent when the proposal polarized groups on the movement's foundational commitments to transparency, non-violence, political endorsements, and structural changes to the consensus process.

Committee formation became a highly debated issue within Occupy LA very early on.⁴¹ On October 3, 2011, a small group at Occupy LA formed a "Committee to

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⁴¹ Videos from 10/4/2012 General Assembly, Last accessed 5/20/2015:

 $a.\ https://www.youtube.com/watch?v=gnGkUeVr8wg$

b. https://www.youtube.com/watch?v=ZyLhwx70eBU

c. https://www.youtube.com/watch?v=yjtCl12_YBQ

d. https://www.youtube.com/watch?v=Us0983un8PU

f. https://www.youtube.com/watch?v=GW2bhpSCvqA

g. https://www.youtube.com/watch?v=IC69gTDOop8

h. https://www.youtube.com/watch?v=U-Kc9F I ec

i. https://www.youtube.com/watch?v=5v3DY-V5JS4

j. https://www.youtube.com/watch?v=H3sVxyHpp24

k. https://www.youtube.com/watch?v=91baA7pL208

End Police Brutality" (CtEPB) without the consent of the GA. This group developed in response to an "Occupy the Metro" action where some marchers chanted: "The police are the 99%," as the police patrolled the protest in the LA metro. The group that disagreed with that chant returned to camp and held a meeting to determine how Occupy LA should interact with police. Later that evening, this group announced their presence as a committee at the GA, notified people of their meeting times, and announced the name of their Facebook group page "End Police Brutality at Occupy LA." The committee stated that they would offer trainings and teach-ins to raise awareness on policing and the rights of protesters. One sticking point was that this committee wanted to stop Occupy LA from negotiating with the LAPD. Others spoke out in opposition to say that ending relations with the LAPD would make the movement appear as if it had abandoned its peaceful call to action.

Through this tense meeting, it was apparent that some believed that peaceful protest should not involve civil disobedience or rejection of police authority, while others thought that clashes with the police was an important aspect of all social movements. Much of the confusion over the role of civil disobedience resulted from the various tactics that different groups employed. Some were unaware that when unions staged actions, they gave the police a list of names and addresses of those who were going to be arrested. For those who had never been to actions that worked in this way, they felt it was a media spectacle and a disingenuous message to the public.

The presence of this committee confronted the GA with a crisis of identity as some thought it was important to invite police into the movement as part of the 99%

and others believed the police were a tool of the 1% to oppress the masses. As tensions rose, a point of process was called to discuss if this committee was even "an official committee of Occupy LA." Because many attending the GA, including those in the "Committee to End Police Brutality," were not present for the establishment of the initial committees, the GA attendees were unaware that all committees had to be proposed to the GA for approval. This was characteristic of the procedure through which many arguments would be settled in the GA; substantive disagreements would be reduced to procedural points of process that rendered the topic secondary to the process. In this instance, the debate shifted from one of substantive moral and ethical concerns to one of procedure because rules for establishing a committee were not followed.

At that point, the CtEPB proposed to the GA to make their presence and purpose official, but the GA had already devolved into shouting. Once the Facilitation Committee refocused the attention of the GA, a vote was held to establish the Committee to End Police Brutality as an official arm of Occupy LA. The procedure to pass a proposal requires the group to make the proposal and then the GA votes. If there are hard blocks, the GA will hear three speakers in favor of and against passing the proposal.

Tensions escalated as one of the moderators facilitating the GA spoke, at length, about wanting to continue to engage with the police. She stated, "We have to recognize that the cops here for us in our little local area have been great." Another participant spoke out against the formation of the CtEPB. She said, "That is trying to

start trouble with the police in the city that had the LA riots. Why would you want to provoke that? We have a good situation now. Do not be an agent provocateur." When the comments were finished, another vote was held. There were several blocks, points of process, and twinkles. The proposal was tabled to be revisited at another GA.

During the GA on the following evening, an opponent of the CtEPB handed out fliers with the names and pictures of the CtEPB's members from a roster he found on their Facebook group. One person from the CtEPB received a flier and yelled at the person who handed her the flier. A large argument broke out in the crowd and attendees rushed towards the fight, creating a large spectacle. The women from the CtEPB addressed the GA, while waving the flier, saying she felt threatened. Others also addressed the GA stating that handing out a flier with the names of participants broke solidarity and endangered those who were listed. By this time, the Facilitation Committee had lost control of the meeting and many walked away in anger.

After the GA, mediation was held at 1am to alleviate the tensions between the person who made the flier and those it labeled as CtEPB members. Several members of the CtEPB left the movement because they felt unsafe on the grounds of City Hall. Additionally, others felt that because the mediation process itself was unfair because the mediator was also Occupy LA's police liaison. The resolution was as follows: the person who circulated the flier was banned from facilitating any Occupy LA GA; the CtEPB would be known as an affinity group; and all were to apologize to the GA for disruption. At the next GA, the CtEPB did not show up, so the person who made the

flier did not want to apologize because he felt he did not do anything wrong by distributing a list that was publicly available on Facebook.

As October turned to November, the encampment grew to approximately 2000 full time residents. The majority living in the camp opted not to attend the nightly GA or participate in committees. Concerns mounted over the nightly "liberal invasion" of people who came to the camp only for evening meetings and to attend the GA. As well, "weekend warriors" were blamed for the party-type atmosphere that overtook the camps on Friday and Saturday nights. Those who sought to GSD (get shit done) began putting off making proposals to weeknights when less people were present at meetings and at the GA.

Still, struggles over if and how to engage with police and city officials dominated meetings and conversations across the camp, in emails, and on social media. The CtEPB controversy resurged on the Occupy LA email list in November and again in December as Occupy LA's relationship with police soured. Moreover, this was the only group made up of predominately black and brown women, who are often the target of state violence. The arguments within the camp were compounded by the national criticism that the Occupy Movement was unequipped to deal with class differences and racism because it privileged a whitewashed liberal political position. A national group emerged called "Occupy the Hood" who sought to address issues racial justice issues within the movement and across society.

Despite the lack of involvement from most of those who participated in the movement, the structure and process of committee meetings and the GA remained

relatively stable throughout the entire duration of the encampment and for most of 2012. Moreover, few were able to challenge the GA's empowerment to make statements or carry out direct actions on behalf of Occupy LA. Those who tried were quickly admonished on social media or shouted down at face-to-face meetings. Occupy LA's Twitter account would inform police or press that Occupy LA did not endorse these actions. Some were angered that the Media Committee would communicate with the LAPD in this manner. One thing became clear as the raid drew near, power was beginning to concentrate in the hands of several people in strategic positions who were either negotiating with the city and police or facilitating the GA.

The rhetoric about the Occupy movement's "leaderlessness" changed alongside accusations that power was concentrating in the hands of the Labor Solidarity Committee, the Media Committee, Actions Committee, and the Facilitation Committee. The Labor Solidarity Committee was a group of thirty unions, who provided funds for Occupy LA's daily operations including \$15,000 per week for porta-potties. They encouraged workers to attend Occupy-related marches and rallies across Southern California. This was an important alliance for Occupy LA because these unions could mobilize thousands of people and provide thousands of dollars quickly. Critically in late November, those who straddled the line between advocating on behalf of union interests and those of the Occupy protesters found themselves in a meeting room inside City Hall negotiating the terms of the camp's eviction.

While many committees and affinity groups held their meetings within the communal camping area, the media tent was the only place with restricted access due

to a series of thefts of phones, computers, and hard drives. Like the Labor Solidarity Committee, members of the Media committee supervised a set of resources including social media, the website, and access to the press. Some alleged that by not sharing passwords and closing off the tent, the Media Committee were not being transparent and democratic in their decision-making. Both groups were charged with acting as de facto leaders because they very rarely gave updates at the GA and restricted membership by not holding completely open meetings.

The Actions Committee was also rather large and meetings were consistently run by two women. Because they were outspoken at meetings, they were also the ones the media turned to during actions. They consistently stated, "Occupy is not a leaderless movement, but a movement full of leaders." This switch in the rhetoric was meant to empower people to take initiative, but it also served to combat the idea that they were becoming leaders of Occupy LA. In late October, this committee drafted a "Statement of Nonviolence" to be read aloud at each GA:

We are an open, participatory, democratic, horizontal, peaceful, and non-violent movement. We are not a leaderless movement, we are a movement of leaders. As a non-violent movement, we have agreed to refrain from violence against any person, from carrying weapons, and from destruction of property. We reject violence, including property destruction, because we recognize that it undermines popular support and discourages the broadest possible participation among the 99%. We believe non-violence promotes unity, strength of message, and an environment in which every one's voice might be heard.

The impetus for this statement was the intensified conflict between police and Occupy protesters in Oakland on October 25, 2011. On that evening, the Oakland Police Department raided the Occupy Oakland camp and some resisted by starting small fires

and smashing windows. Debates in Occupy LA sprung up on how to handle a possible eviction knowing that some protesters were intent on defending themselves against police intrusion. The CtEPB reformed and began holding actions and press conferences in support of Oakland. This triggered another series of arguments and online debates about the nature of non-violence and the use of Occupy LA as a political platform. Along with the "Statement of Non-Violence", the Actions Committee sought greater autonomy from the GA process itself and began to plan and participate in actions that did not go through the proposal process at the GA. Here, the argument for respecting a diversity of tactics empowered nearly any group to plan actions according to their own desires.

In the week leading up to November 17th (the movement's two month anniversary), members of the Media Committee and Actions Committee along with several from the Labor Solidarity Committee, organized a secret action with the intended result of starting a second occupation in Los Angeles' Financial District. Planning for this expansion was held outside of the camp at a local coffee shop and was invite-only. I attended at two of the four planning meetings. The plan was to use a permitted march by labor unions as a cover and when the large march passed by Bank of America Plaza, Occupy protesters were to run into the plaza and set up tents. When envisioning this new camp, this group also drafted a set of camp rules and wanted the "Statement of Nonviolence" to be read and signed by each member of the new occupation. The message was clear: if you were participating in the new camp, you must join a committee and work for the political goals of the movement.

Unfortunately, the action did not go as planned and seventy-three people were arrested.

Issuing the "Statement of Nonviolence" without GA approval and collusion between committee members in planning the biggest and riskiest action to date raised the ire of those in the Facilitation Committee who advocated for an anarchist approach to reaching consensus. The description of Occupy as "a movement of leaders" coupled with the definition of violence that prohibits property destruction raised substantial debate between the group who planned the expansion and those who felt the secrecy of the action undermined the GA process. The main complaint about the "Statement of Nonviolence" revolved around the concern that violence against people is not the same as violence against property, yet both were included in the same sentence. In the following weeks, many new proposals were presented at the GA that intended to bring accountability and transparency to the movement. Proposals included issuing a statement inviting city officials to participate in the GA if they want to negotiate with Occupy LA; all proposals must be submitted to the facilitation committee 24 hours in advance; all committees must announce meetings open to the public and post notes online. The combined effect of these changes meant that members of the Facilitation Committee would see proposals well before those in the GA and could muster support to sway the vote. Additionally, because the Facilitation Committee decided who spoke, those who fell out of their favor were pushed down the line of speakers.

For much of December 2011 into January 2012, the GA was a battleground for control over digital platforms between the warring members of the Facilitation

Committee and Media Committee. Some members of the Facilitation Committee combined forces with others upset with the Media Committee to form "Occupy LA Anti-Social Media," a group that "promotes anonymity, collective decision-making, community and truth" through a blog and Twitter feed.⁴² Of the Media Committee, OLAASM write, ⁴³

With their iron grip on certain key elements of the OLA movement: the twitter feed, the website, Union contacts - the Liberal Reformists refuse to engage with the masses aside from remotely, and yet insist that they are able to represent voices they do not listen to nor engage with. Knowing that everything they do is with a motive to control or gain personal, material benefits (a recent OLA tweet was 'I need a 4G mobile hotspot. Please email me money for donations') they think everyone in the movement is like them, and thus regard them with suspicion. They hate the Radicals, because they advocate leaderlessness without suggesting that natural leaders do not emerge. They do, but those leaders use their earned and unearned social power responsibly, to empower others who will then take their place, because the system is such that dependence on one person is abhorred and decried.

Many of OLAASM's contributors were not anonymous within the camp because they made the same critique at other committee meetings as well as at the GA. Here, there is a clearer sense of what leaderless means to those who believe in this value. It is not that leaderlessness can be maintained, but that responsible leaders train others to take their place.

Moreover, controversy over resources was not directed at the Resource and Finance Committee, as many of those members were careful to avoid contentious positions across committees and affinity groups. The process for obtaining monetary resources was highly structured and limited to \$50 for most requests. Any request over

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⁴² For the website, visit: http://ola-asm.tumblr.com/ Last accessed 5/20/2015

⁴³For the entire post, visit: http://ola-asm.tumblr.com/post/15768432649/liberalphallusy Last accessed 5/20/2015

\$50 would have to be presented to the GA, so that many of the decisions about spending occurred in consultation with large groups.

Some in the Media Committee stopped showing up to GA after a series of shouting matches and one physical altercation. OLAASM characterized the situation as follows: 44

They [Occupy LA Media Committee] close down debates on issues like racism and property damage and the difference between pacifism and nonviolence, because they fear opinions that are different to their own. They fear disturbance, controversy and even simple discussion. This is apparent from continual attempts made at Los Angeles' General Assemblies to have adult, rational discussions about contentious topics which are very real threats - such as cooptation, or adopting the same diversity of tactics advocated by the Black Panthers and the Civil Rights movement.

Importantly, the space of places was becoming more densely knotted to the space of flows after the full-time occupation was disbanded. More and more discussion shifted from face to face gatherings into the TDE of protesting, where one could still participate full-time. Arguments became more intense and factions formed as platforms were diversified. Consider the following changes in October 2011, 2,049 emails were sent through the Occupy LA email list. In November, this number jumped to 6,800 emails, while in December 2011 the number of messages sent hit a record high of 8,701. However, in January 2012 that number fell to 3,050 and by February 2012 was down to 1,404. Contrary to the way these numbers read, discussion across Occupy LA about these issues did not decrease in January and February 2012. Rather, the platforms shifted and debates became more heated across numerous digital spaces,

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 $^{^{44}~}See:~http://ola-asm.tumblr.com/post/15768432649/liberalphallusy~Last~accessed~5/20/2015$

including blogs, the Occupy LA website, SMS text loops, several new Facebook groups with hundreds of posts per day, and on Twitter. The struggle over the 'official' Occupy LA social media commons, especially the passwords, lasted until November 2013, where an irreparable split among members left some in control of the Facebook page and others held the password for the Occupy LA Twitter account.

While I used the example of Occupy LA to show how the GA structure and process worked, I illustrated how the structure and process were often manipulated to reach the desired goals of those who sought power. One the one hand, calling the movement leaderless was an effect of the structure and process, but the prescribed roles were always inhabited by individuals who were implicated in relations of power. The roles they took on reified their perceived power across the camp. If one could not accomplish their goals through the GA, they sidestepped it altogether and made *post hoc* justifications for their actions. Many who were considered leaders in the days of the camps felt alienated and left after the raids. The Labor Solidarity Committee began holding meetings called the 99% Table and moved away from the term Occupy in their subsequent actions. The Actions Committee slowly stopped meeting as other committees began proposing actions based on issues such as gay rights, healthcare, housing, and free education.

The same process of identity-formation that divided Occupy LA functioned as a rallying point for those building InterOccupy. Critically, debates about leaderlessness, nonviolence, and how to retain the autonomy and integrity of local occupations were present at every camp I visited. They were also the foundation of

InterOccupy's emerging praxis. Because InterOccupy insisted on using the GA structure and process as a way to preserve the principle of horizontal decision-making, it meant that those who wanted to proclaim themselves as leaders or as national representatives could do so without much resistance as there was no way to collectively discredit their statements. InterOccupy was born within this controversy and just as I witnessed attempts at shutting down discussion, sidestepping process, and coalition building that undercut the belief in "direct democracy" at Occupy LA, so too had others in Philadelphia, Portland, Kalamazoo, and New York who were brainstorming how to structure InterOccupy. Because those hosting the Occupy Coordination calls were promoting themselves as the national organization of Occupy Movement, InterOccupy felt even more strongly that our calls should focus on coordinating GA-to-GA communication. InterOccupy believed that the GAs in each city would continue if the camps were raided because of the intense dedication participants showed by sleeping in parks. However, we underestimated the importance of having a space of places for the movement to work as many Occupy protesters were harassed by police after the raids and some were even chased out of other parks by police for fear that they would re-occupy.

The first Monday Night General Call was held on 10/24/2011, which I described in chapter 4. The Movement Building Working Group in NYC brought together forty different Occupy encampments (with multiple people sharing a single line) and several website based projects on a single call to address the need for communication across the camps. While the call was initially very chaotic as

participants and operators alike were becoming accustomed to the format, eventually the large conference call was broken into six smaller groups to address the question: "what are the goals for national communication?" The report backs to the larger group from the smaller groups contained several common goals, including: to coordinate and mobilize for national actions; to share best practices and resources; to help smaller encampments grow; establish regional assemblies; and to hold more conference calls. Not a single caller spoke up to say that, there was no need for widespread communication. If this issue had been raised, it could have potentially derailed the entire discussion.

The second half of the call was devoted to an "assets and needs assessment" so that encampments could identify and troubleshoot common problems. While the assets listed were few, many spoke highly of holding successful actions, teach-ins, and workshops. Most of the respondents revealed a need for IT support, a plan for community outreach, access to WiFi and computers, and information on cold weather camping. Eight participants cited a need for support with the structure and process of facilitating GAs and their relationship to working groups. It signaled that even though the websites provided many instructional pamphlets, there were still many questions of how to do democracy in this way.

At this moment, I thought back to the first GA held at Los Angeles City Hall after a large march on October 1, 2011. The process of the GA was explained using a small speaker and microphone to a half interested crowd of hungry and exhausted

protesters. 45 One activist who helped to organize the site of the occupation and was the liaison to the LAPD and City Hall spoke up, using the human mic to announce: "We are going to have to have a real short meeting in some ways cause we got to make sure we are out of the park and camping on the sidewalk by 10:30." As he said the words "at 10:30" the crowd, who were repeating his every word, started to boo. A single voice yelled, "We should vote on that 10:30 shit!" to which the crowd roared in agreement. There was some back and forth between the crowd and the Facilitation Committee presiding over the GA. When the Facilitation Committee finally regained control of the GA, a short preamble was read that invoked a well-known Zapatista saying, "We are not going slow. We are going far." The preamble emphasized that coming to consensus required a lot of time, a point I found myself echoing as we built out InterOccupy's infrastructure piece by piece. The Facilitation Committee presented the hand signals and described the process, but there was a lot of cross talk and dissention within the crowd. Much of the confusion stemmed from the pre-planning of the encampment. Many were surprised to see committees already formed with meeting times and agendas previously set. Moreover, very few knew the plan to move the tents to the sidewalk in order to appease city ordinances. Most of those who brought camping gear had already set it up on the lawn and were resistant to moving it on principle. The confusion over structure and process carried on for the duration of GA meetings, but the Facilitation Committee did read instructions aloud at every GA in order to educate newcomers. Still, there remained confusion.

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⁴⁵ Here is a video clip of the initial GA at Occupy LA referenced here: https://www.youtube.com/watch?v=Lnn90hj8BMI Last accessed 5/20/2015

When participants on that first InterOccupy conference call signaled problems understanding or relying on the structure and process of a GA, InterOccupy did not react immediately. In fact, the need seemed to go unnoticed for the next few meetings as we began to rely heavily on the GA process to ensure orderliness on the calls. One member of InterOccupy did begin an email list and a call series for those interested in learning facilitation in mid-November. Other thematic calls were announced quickly that invited direct communication between media, IT, and direct action committees to begin coordinating across camps. I began hosting an "Emerging Occupations" call series to address issues related to obtaining city permits, dealing with police, and cold weather camping. The purpose of the call was to assess and share tactics between encampments and to generate a list of needs from encampments. One question echoed on each of these calls was, as one participant asked, "Is an actual occupation important as part of the general movement's strategy?" Not only were participants confused about the structure and process of the movement, many (usually from small towns) were puzzled by the need for an encampment.

I had direct experience with this issue when visiting Occupy Long Beach in October 2011. A small encampment was set up in front of Long Beach City Hall, but all items had to be moved to the sidewalk by 10pm. A few dedicated (and homeless) Occupy activists spent several nights on the sidewalk and were frequently harassed by police. On one occasion, the police told the campers that they were not allowed to have tents, blankets, or even lay down on the sidewalk. The police even went as far as to install massive lights around the park that turned night into day. The protesters were

told they had to be in continuous motion or they risked arrest. Similar situations played out in Orange County and San Diego, where police declared new rules each evening for what was allowed. Long Beach protesters challenged the city, which were willing to grant a permit for a demonstration in a park far from the downtown core. None was willing to move. One evening the GA in Long Beach addressed the issue and the assembly was split on if there needed to be a nighttime occupation at all. Those who slept there overnight were angry at the lack of support, but others felt the encampment was a distraction from "moving forward to end corporate personhood and meet the goals of the 99%." A similar split occurred in Occupy Cleveland over a call to re-occupy the park after an eviction. Those who had homes to go to for the night no longer supported a full-time illegal occupation, but they did support a smaller sidewalk tent to remind the public of their presence. From my experiences in these camps and hosting the Emerging Occupations call, it was slowly becoming apparent that a major structural transition was on the horizon even if police did not intervene. Of course, police intervention hurried the transition and radicalized the movement in many ways.

By early November, InterOccupy settled on an initial call series that connected the committees already established at occupations (Media, Facilitation, Direct Action, Information Technology) along with a "Monday Night General Call," a series of regional calls, and a weekly "Emerging Occupations" call. This structure coupled with the Maestro Conference Call technology, which enabled participants to imitate hand signals used at GAs by pressing numbers on their keypad, meant that conference calls could mimic the GA process. For example, by using a web browser Maestro allows

the facilitator of a conference call to view the list of call participants, to turn their microphones on and off, to break larger groups into smaller ones, as well as for participants to press the numbers 1-5 in order to vote on issues or proposals.

InterOccupy coded the numbers this way: pressing 1 to get on stack, 2 to agree, 3 to disagree, 4 for a point of process or clarification, and pressing 5 meant the caller was experiencing technical difficulties.

Because the technology afforded the ability to structure conversations as they were in the camps, it also meant theoretically that anyone wishing to speak could. Critically, the call participants did not have a way to view the same control panel as the facilitator, so they had to trust that the facilitator was not excluding anyone. The lack of vision gave the facilitator a significant power over the group. There were several times when technological glitches made some callers invisible to the facilitator. Callers assumed they were being discriminated against in these situations. While this was not the case initially, overtime it became an accepted practice to limit the input of some frequent callers. In light of this and other problems that I detail in chapter 7, InterOccupy adopted a policy of neutrality in facilitation of calls. ⁴⁶ The policy disallowed facilitators from participating in the dialogue on the call.

As well, Nate, Ash, and Larry of Occupy Philadelphia started to work on a schematic of how we could bring the movement together without threatening the autonomy of the local assemblies. Larry repeated on many occasions, "Our process is our message," so it was no surprise that the plan for networking the movement would

⁴⁶ InterOccupy's statement of Facilitation is available here: http://interoccupy.net/about/statement-of-integrity/

be formatted through GA-to-GA communication. On 10/30/2011, Nate sent an email to the Call Planning Team regarding how to structure communication across the movement:

We are all effectively part of a Movement Building working group started in NYC, but I don't believe our next step should be to ask others to join us specifically in "Movement Building." What we really need is communication, which will naturally facilitate the building of our movement, without dictating how we think the movement should be built or establishing ourselves in a position to unduly influence its building.

In Philly we're talking about setting up a new working group to function as a "Committee of Correspondence" (google the term if you're not familiar with its important historical connotations), which would take as its responsibility communication among and between working groups and occupations, along with discussion and debate of key issues and problems facing our country and the world, including the structural and systemic issues that have brought us to where we are today, with the intention of ultimately proposing solutions. To the crowd in Philly, it seems that this is where our movement must head next.

Establishing a central clearinghouse for communication between movements (such as Diaspora) will enable us to coordinate on direct actions, or other campaigns, but the mechanism within each camp or GA need not be the same. If we, as call facilitators, maintain contact info for a few heavily involved people in each city, we can ensure that no GA falls off the map. We can also act quickly to get various voices together, as needed, to coordinate on specific issues or actions that might come up.

So in short I'm loath to urge other movements to create Movement Building working groups, but I think it would be smart (from a movement building perspective) for the bigger occupations to set an example by forming Committees of Correspondence. I think it is more in keeping with the spirit of the movement thus far. I know I react viscerally to the idea of a national "Movement Building" or "Coordination" group. We should do everything we can to foster and facilitate those goals, but must be very careful how far we propose to go.

Just as this movement has no spokespeople, because it speaks for itself (literally and figuratively), I believe this movement should have no designated or self-appointed "Movement Builders" either. This movement is already building itself. We just need better communication.

More to come from Philly before the call... Nate

More so than any other contingency in InterOccupy, Nate and Larry of Occupy Philadelphia really pushed forward with the idea of Committees of Correspondence. Nate had a passion for American history and often thought of the movement in historical terms. In fact, on 10/20/11 Occupy Philadelphia issued this communique to the movement asking for direct communication between assemblies:

We, the General Assembly of Philadelphia, Pennsylvania, in solidarity with all other peaceful occupations in communities around the world, offer this first official message from our General Assembly to every other General Assembly on this planet. We arrived at this message through our process of direct democracy.

We hereby invite the General Assemblies of the world to join us in organizing the first Regional General Assemblies, on a date to be determined by the consensus of all participating Assemblies. We hope for this discussion to lead to National General Assemblies in our respective countries and eventually an International General Assembly, if we all so choose. We hope for Online General Assemblies as well, and we look forward to getting to know the people of this global movement.

Most importantly, we intend for this message to establish a precedent of direct assembly-to-assembly correspondence, which we believe should be the primary means through which this movement mobilizes and communicates. We can only unite, grow, and move forward together if we proceed with complete transparency and openness, as well as a firm commitment to direct democracy.

Because our process – as much as any demand – is our message, we believe that this discussion alone represents a truly historic moment for our growing movement.

From one democratic assembly to another, we appreciate your consideration and await your reply.

They began by announcing the idea of local communication groups called

"Committees of Correspondence" (CoCs) on the second Monday Night General Call.

They pitched the idea on the call hosted by Occupy Philadelphia on 10/31/11, Nate explained:

Our goal at this point is simply to foster direct communications between occupations. Please send an email to Occupycontactlist@gmail.com to share your name, email, number, which occupy and your role there. If you share, you will receive the full compilation back.

Also, a "Committee of Correspondence" was announced at tonight's Philly GA, as an open working group which aims to become a link between Occupy Philly and other GAs or protests. In NYC, a "Movement Building Working Group" serves the same purpose. For us in Philly, the name is significant because the original Committees of Correspondence, grassroots, spontaneous local committees organized by pre-revolutionary patriots in the 1760s and 1770s, resulted in the first Continental Congress. When the media and the powers-that-be realize we're out for their jobs, maybe they'll start actually doing their jobs: serving the people.

The link between American history and the way InterOccupy developed communications between GAs through CoCs was a direct result of Nate's unabashed love of history, he told me:

I love history. And I'm obsessed with it. And Philadelphia is full of it. And I felt it was appropriate for Philly to take this role as well because nothing's going to happen if nobody does, if nobody steps forward and tries to do something. We thought we had a style of doing it that wasn't going to alienate people, that was in keeping with the movement's principles, and, yeah we had to fight along the way sometimes to get people to agree with us.

As CoCs began contacting InterOccupy, Nate and Larry spent most of the time organizing the email contact list for CoCs, operating a conference call for all CoCs to update each other on their encampments. At this critical juncture, it is important to see that many camps had already developed a committee dedicated to communicating with other camps in their area. The idea of needing to network the camps locally was familiar to most and did not pose many significant ideological problems. Instead, the one complex issue lingered on how to structure national communication in a way that captured the spirit of Occupy as a direct and democratic movement. That is, should national committees and/or working groups be organized or should InterOccupy solely function as a conduit between local assemblies? The adoption of direct GA-to-GA communication did not take into account that some were confused by the GA process or were unable to attend any GA meetings because of geographic isolation, limited physical capacities, or other obligations. How were these individuals to participate in InterOccupy, if they had no direct connection to a physical encampment? There was also no back-up structure in place to ensure communication continued if GAs were no longer functioning.

To see why GA-to-GA communication became the central organizing mechanism of InterOccupy, it must also be understood that descriptions of the structure and process of the GA cannot convey the intensity of occupying as a form of action that codifies a love of the social. Jackrabbit, a fellow co-founder of InterOccupy and a core member of the tech/web team, described becoming interested in the Occupy Movement because he followed the hacker collective Anonymous very closely on

social media. Not long after the occupation of Zuccotti Park began, Jackrabbit took the train into Manhattan. He describes the experience both as a reunion and as an exciting beginning of something very new:

When I got to the park, I mean it was just -- there was something about it that just really seemed special. I don't know how to describe it. It was exciting. It was -- there was just -- there was an energy in the air around it that made it really -- that made it feel really special. And then on top of that I ran into some old friends of mine who I knew from 20 years ago when I was like an anarchist squatter in Philadelphia. They just -- it was the first time I had seen them literally in 20 years and they happened to be there too. And, you know, and they were kind of like -they had had -- they had other friends who were kind of more or less involved and who were kind of like hovering around. And so we -- it was just there was an air of significance that I can't really explain in any other sense. That you know there was a really heavy police presence. It was very ominous and somewhat, you know, nervewracking and you know the park was surrounded by barricades. And it just gave it all like this sense of -- like it -- it felt like there was something happening.

The story of rekindling old friendships through the movement was not particular to Jackrabbit's case either. It is not that the Occupy movement was solely a technologically dense environment; it also had a remarkable social density that produced a kind of solidarity that went beyond the normal limits of friendship. It's not that technological density exists in a vacuum outside of the social, where the numbers of plugs and wires define a point of saturation. Rather technology, especially communication technology, is animated by people coming into contact with each other. More contact means greater meshing of technology and the social. The GA was a technologically dense environment in the sense that it brought together people, ideas, and technology that reached outside of the camp through livestream broadcasts and social media. It was a social infrastructure that had to be learned and through practice

became a mode of living; a way of doing democracy, and a critique of the prevailing social system that required submitting to discipline, order, hierarchy, and representation. As one became accustomed to the Occupy culture, the old world appeared even more unequal, hostile, and exclusionary by design. I often overheard people at Occupy LA thanking each other for holding a conversation and remarking how the encampment was breaking down the barriers that were literally built into the city's urban plan to divide races and classes with highways.

Participating in an Occupy encampment required particular kind of passion matched with patience and risk. Participation in the GA fundamentally changed one's manner of speech, thought, and pattern of actions. The use of the human mic was a rhetorical strategy that required the full mental and physical attention of the crowd who recited the speaker. It also closed down avenues of disruption, as a single voice could not penetrate the crowd when they spoke in unison. As well, learning the process of GA-style non-verbal communication through hand signals took a lot of practice. Meeting after meeting, day in and day out, participants practiced these signals as they took on weighty issues like what actions should be planned, what demands should be made and of who or what, as well as how to address medical, sanitation, and nutritional issues in the camp, and so on.

The embodiment of the structure and process within the occupation led many to feel estranged from society outside the occupation. Some remarked that life outside the camp was slow, boring, and lonely. Others found themselves using the GA hand signals in their workplaces or during social gatherings. While this confused those who

did not know what was going on, the culture of Occupy soon began to seep into places outside the camp. In some instances, the effect was the integration of Occupy-style assemblies into workplaces, even within the UCSD Science Studies Program, to open discussions on hierarchy and direct involvement in decision-making. Critically, the GA structure was about breaking down ingrained hierarchies that were preventing the flow of communication and ideas across groups. The process required listening to dissent in a way that could bring about agreement through the synthesis of ideas. As someone who has a difficult time relinquishing control during group conversations and holds strong political opinions, I must admit that remaining open to all matters of opinion was difficult, if not exasperating.

For example, in early October as the Los Angeles General Assembly was gaining stability in format and began consistently voting on proposals, a man in his mid-50s took the floor. He spoke eloquently, using the human mic for nearly ten minutes, about the need to change the United States Government's foreign and domestic policies on war and the economy. The crowd was rapt and repeating every syllable. Then he declared, "I have a proposal. We should remove the letter N from the alphabet. This way any existing contract with the United States Government will be rendered invalid." As the crowd repeated this, some began to laugh, while others booed loudly. This was the very last time I participated in the human mic without knowing personally who the speaker was and if they were sane. I was not the only one who approached the human mic with caution though.

As I travelled between different camps, I charted a pattern of engagement with the human mic that preferred the voices of men over women as well as of those who could speak in a rhythm conducive to repetition, as if the speaker was delivering a sermon. I also witnessed repeatedly the use of the "process" signal to silence women during meetings. When raising a point of process, the person is immediately given the attention of the group to explain why they feel the current speaker is going off topic. It was regularly the case that women were describing a specific moment from their life history that illustrated a point, but were not directly communicating their main point outside of their evidential experience. Because they situated their point within a subjective story, men were confused.

During a meeting of Occupy LA's Objectives and Demands Committee, one man repeatedly called "process" on several women participants when discussing the mortgage crisis. He asked: "What does this have to do with anything we are discussing?" Whereas some men in this committee were most interested in fomenting grand plots to "end the fed," most women were concerned with housing and feeding their families. Women were claiming that "Process is the new Shut Up, Bitch" and something needed to be changed. Eventually I pushed this committee to address the overwhelming presence of male voices and rearranged the meeting style to incorporate small group discussions so that more voices could be heard. Reformatting this large group of sixty into smaller groups angered those who preferred the larger assembly, but the changes remained intact. Later and for similar reasons, the GA incorporated a component of small group discussion before voting on proposals. It is not that

participants blindly adopted the structure and process of the GA, but it was a starting point that required participants to engage in continuous repair when the design failed to meet the needs of the group.

InterOccupy sought to establish a structure and process to ensure many ideas could be exchanged across multiple platforms centralized under their infrastructural oversight. Castells (2009) refers to this as "networking-making power," where "programmers" delimit the goals assigned to the network and "switchers connect and ensure the cooperation of different networks by sharing common goals and combining resources, while fending off competition from other networks by setting up strategic cooperation" (p. 45). InterOccupy was attempting to redefine the mechanisms through which the movement as a network would speak to itself, while at the same time bracketing out the limits of who gets to represent the views of the network. As Nate was fond of saying, "We build the tracks, but it is up to the movement to drive the train."

While we were falling out of step with Occupy Coordination, alliances were falling into place with other movement programmers, namely Occupy Together and the social media teams for other encampments. Occupy Together was a public website that used the software of meetup.com to coordinate in person meetings, where participants online could set dates, times, and places for physical meetings through discussion boards. Having Occupy Together promote our call calendar on their website and email list gave the InterOccupy project a legitimate place in the established network. If there were communication breakdowns, repair would be

necessary and this was considered part of the process of InterOccupy's network-making activities as Jackrabbit explained:

There's never been any real stated boundaries, right? There hasn't been any real -- anything that looks like what you could describe as an institution and only -- maybe only in the most general sense. But we acted as though there was. That is what is really fascinating. That we acted as though there were somehow rules, guidelines, that there were certain protocol that you followed even though the truth of the matter is that we're making it all up as we went along. It seemed like -- at the time though it seemed like it was really important for people to be able to communicate to each other. Because my personal feeling is that power is built through coordination. So for me, it seemed really obvious, self-evident to me that if there was going to be any real -- kind of like if -- if the people who were occupying space really wanted to affect some significant change that there was going to have to be a coordination that happened across the different occupations across the country, and hopefully across the world as well. So for me like, you know, what I started doing immediately was in addition to do the politics and reform working group, was I started really going out of my way to try and make connections where ever I could to occupations around the country.

Most importantly in terms of network-making, Nate and Larry solved the problem of how to make an email list that allowed for structured, yet open email communication across camps. At this time there were several national email lists floating about and each circulated hundreds of emails a day, which were far too many for anyone to read much less share in their camps. The CoCs who signed up were given access to the large email list generated by the Monday night calls and the CoCs contact information was listed on the InterOccupy website for all to use. Nate and Larry also circumscribed the purpose of CoCs which they published on the InterOccupy website:⁴⁷

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⁴⁷ Source: http://interoccupy.net/services/connect-to-other-occupations/ Last accessed 5/20/2015

This committee, ideally, would consist of a broad spectrum of working group representatives and others to collectively perform the following functions:

- Serve as conduits for internal communication to outside occupations including official GA-to-GA communication.
- Maintain an internal directory of working groups and other pertinent personnel contact information so that, should a person(s) or working group within your occupation need to be contacted by an outsider, that information is readily available.
- Coordinate the participation of your Occupation's involvement in regional conferencing.
- Any other action to aid in Inter-occupation communication.
- Make your services publicly known so if a working group or individual from your local occupation needs to connect with someone from another city, they know they can come to you for assistance.
- Publicize pertinent InterOccupy calls to the members of your local occupation who would be most interested in the call topic(s).
- Please note, these Committees of Correspondence (CoC) are in no way meant to serve as the official spokesperson for your occupation's GA. Further, CoCs should be transparent, open to everyone, and aid any other efforts by individuals or groups that seemingly fall under the purview of the CoC.

As the GA process of communication fell into place and we became more practiced operators of conference calls, more and more conversation within InterOccupy swirled around the purpose and scope of our website and Call Planning Team. Were we seeking too much power by directly connecting committees to committees? How could GA to GA communication be formatted? How do we ensure that openness and horizontal decision-making is practiced on all of our calls? How can we convey information about the conference calls in an open and transparent way on our website, without giving the impression to the media that we were some national federation of occupations? And, perhaps most importantly, how do we separate what

we do and who we are as a group from other groups using similar technologies for different ends? One way to ensure that InterOccupy remained autonomous from other groups was to leverage the power of the NYCGA to issue official statements that were then circulated online. The NYCGA issued this communique on 11/20/2011:⁴⁸

This communiqué is presented by the people of the Liberty Plaza General Assembly in New York City to all the good people convening at local General Assemblies around the world.

There are hundreds of Occupations and General Assemblies standing in solidarity to protest mass injustice and create a better world. To strengthen our solidarity, we need to develop a mechanism of communication between all of our General Assemblies.

To address this need, we have created an Inter-Occupation Communication group here at Liberty Plaza. Our InterOcc group works with analogous groups from other Assemblies to provide horizontal channels of communication that adhere to open and transparent democratic processes in order to connect individuals or working groups across Occupations.

We ask that Inter-Occupation Communication groups already established at other Assemblies make their existence known to us. Given the challenges we have all been facing that may be alleviated by better communication, we suggest that any Assembly that does not yet have an Inter-Occupation Communication group establish one and announce its existence publicly.

This communiqué, along with all other official General Assembly communiqués, will be posted on InterOccupy.org. Individuals and Inter-Occupation Communication groups can also contact other InterOcc groups on InterOccupy.org.

General Assembly Liberty Plaza New York City

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 $^{^{48}}$ Source: http://interoccupy.net/blog/communique-from-liberty-plaza-nyc-11-22-11/ Last accessed 5/20/2015

On the surface, this document read as if the NYCGA was asking other GAs to be in contact with them through InterOccupy. It is also laying out the rules of engagement for legitimate communication across camps, particularly the clause: "Given the challenges we have all been facing that may be alleviated by better communication, we suggest that any Assembly that does not yet have an Inter-Occupation Communication group establish one and announce its existence publicly." By this time, Occupy Coordination was not the only other networking group looking to unite the movement around a centralized agenda. Another group, calling themselves the 99% Declaration (99D), pushed the idea of a national convention where each Occupy GA would elect and send two representatives to Philadelphia on Independence day weekend to craft a statement on behalf of the entire movement.

The 99D was an especially egregious violation the NYCGA's Statement of Autonomy that eschewed representation. While decentralized movements often have multiple, and sometimes contradictory, values at play, the internet connects these groups and provides a space for deliberation. The 99D held a presence on the NYCGA website, but did not have an open policy for admitting new members. In addition, they were not based primarily in NYC. When the NYCGA website was developed, the site allowed anyone to make a group and manage it as they saw fit, but this proved to be a problem as groups and monetary resources proliferated rapidly. Moreover, the 99D name was also easily confused with "Declaration of the Occupation of New York City," a statement issued by the NYCGA on September 29th that laid out the reasons for protesting. In this way, most of the debate related to the 99D played out in the

comments on the NYCGA website, where many called for removal of this group from the website. Removal was tantamount to disenfranchisement.

As the Occupy movement gained prominence, many became wary of attempts at co-option from groups that used the leaderlessness of the movement as a veneer to raise money. The 99D were raising tens of thousands of dollars under the guise that they were an official working group/committee of the NYCGA. Angered by the use of Philadelphia for the 99D's "Continental Congress 2.0," Occupy Philadelphia issued a statement condemning the 99D. A few weeks later, a proposal passed at the NYCGA asked for the 99D to be removed from the NYCGA website. InterOccupy helped develop proposals from Occupy Philadelphia and NYCGA. In this moment, InterOccupy shifted from building and maintaining a communications infrastructure for a leaderless movement into a leader-full group concerned with maintaining the integrity of the movement. It was not the last time InterOccupy had to clarify our position relative to other groups, who sought to use the platform and name of Occupy to brand their TV show, political campaign, or line of clothing.

The decentralized nature of the movement was only part of the problem for establishing legitimacy of groups. The public who were donating to the movement stood at a relative distance from the camps. In this way, it was easy to misrepresent oneself or a group as a legitimate project that came directly from the grassroots, if one could get the attention of the media. Significantly, the amount of donations and press the 99D were receiving signaled to InterOccupy that people did want a national gathering. Our problem was how to facilitate one that supported the values of the

movement for openness, transparency, direct democracy, and horizontal decision-making. Nate and Larry took up the charge of holding a "National Gathering" in Philadelphia on Independence Day weekend as the "official" Occupy gathering. The choice to hold the National Gathering on the same weekend in the same place as the 99D's meeting was an attempt to "co-opt the co-opters," as one organizer commented on Facebook. In this way, InterOccupy used its network-making power as switchers to reorient the meaning of the 99D's call to action on Independence Day weekend in Philadelphia.

While most of the core organizers of InterOccupy were invested in building the CoC network and derailing the 99D campaign, the committee-to-committee call series was doing remarkably well and had spun out into separate smaller groups. For example, media groups managed to gain support from director Michael Moore and all were in talks via conference calls to produce a collaborative Occupy movement documentary with footage crowd sourced from camps all over the USA. This project collapsed eventually as infighting stalled any progress. The InterOccupy Direct Action call series spawned the first coordinated distributed direct action across the movement: the "West Coast Port Shutdown" scheduled for Dec 12, 2011. This action required a shared information and tactical milieu. Planning for this action began on 11/15/2011 when Occupy LA consented upon a proposal to shut down the Port of Long Beach. The proposal read:

Action: Occupy the Ports/ A Day without Goldman Sachs

What: Carry out a port action, "Occupy the Ports/A Day without Goldman Sachs," on December 12 as part of the Dec. 12 day of action,

Boycott and March already adopted by the GA. The occupation will take place at at least one facility owned by SSA Marine, a shipping company belonging to Goldman Sachs, (coordinated with a possible port shut down by the port truck drivers) as a build up towards a General Strike on May 1, 2012.

How: a) Establish a General Strike Preparation Committee of Occupy LA, which will work with the Dec. 12 Coalition, port truck drivers, longshore, warehouse and other port workers, community residents, unions, and Occupy Long Beach to plan and organize the Dec. 12 actions. b) Develop alliances in the process with organized and unorganized labor, student and community groups to prepare for and build towards a General Strike on May 1, 2012, or at any moment that circumstances and conditions demand. c) Call on other Occupations to act on Dec. 12 and May 1.

Why: The 1% are depriving port truck drivers and other workers of decent pay, working conditions and the right to organize, even while the port of LA/LB is the largest in the US and a huge engine of profits for the 1%. The 1% have pursued a conscious policy of deindustrialization that has resulted in "trade" at the port meaning that there are 7 containers coming in for every one going out. The 1% have driven migrant workers into a "grey market" economy and repression. The 1% use police brutality and repression, jails and prisons to suppress, divide and try to silence the 99% and all who oppose their insatiable greed. To put an end to all that, we call on the 99% to march, boycott, occupy the ports, and STRIKE on December 12 for full legalization, good jobs for all, equality and justice. The port drivers and other workers have the power to push forward the kind of change we need. By building towards a General Strike, we can spread the Occupy movement and sink roots in the 99%.

Occupy Oakland followed this call with a solidarity communiqué on 11/18/2011, which asked for the participation of the whole movement in "blockading the flows of capital." It read:⁴⁹ Proposal for a Coordinated West Coast Port Shutdown, Passed with unanimous Consensus by vote of the Occupy Oakland General Assembly 11/18/2011:

In response to coordinated attacks on the occupations and attacks on workers across the nation:

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⁴⁹ Source: http://occupywallst.org/article/occupy-oakland-calls-total-west-coast-port-shutdow/ Last accessed 5/20/2015

Occupy Oakland calls for the blockade and disruption of the economic apparatus of the 1% with a coordinated shutdown of ports on the entire West Coast on December 12th. The 1% has disrupted the lives of longshoremen and port truckers and the workers who create their wealth, just as coordinated nationwide police attacks have turned our cities into battlegrounds in an effort to disrupt our Occupy movement.

We call on each West Coast occupation to organize a mass mobilization to shut down its local port. Our eyes are on the continued union-busting and attacks on organized labor, in particular the rupture of Longshoremen jurisdiction in Longview Washington by the EGT. Already, Occupy LA has passed a resolution to carry out a port action on the Port Of Los Angeles on December 12th, to shut down SSA terminals, which are owned by Goldman Sachs.

Occupy Oakland expands this call to the entire West Coast, and calls for continuing solidarity with the Longshoremen in Longview Washington in their ongoing struggle against the EGT. The EGT is an international grain exporter led by Bunge LTD, a company constituted of 1% bankers whose practices have ruined the lives of the working class all over the world, from Argentina to the West Coast of the US. During the November 2nd General Strike, tens of thousands shutdown the Port Of Oakland as a warning shot to EGT to stop its attacks on Longview. Since the EGT has disregarded this message, and continues to attack the Longshoremen at Longview, we will now shut down ports along the entire West Coast.

Participating occupations are asked to ensure that during the port shutdowns the local arbitrator rules in favor of longshoremen not crossing community picket lines in order to avoid recriminations against them.

Should there be any retaliation against any workers as a result of their honoring pickets or supporting our port actions, additional solidarity actions should be prepared.

In the event of police repression of any of the mobilizations, shutdown actions may be extended to multiple days.

In Solidarity and Struggle, Occupy Oakland

-In Oakland: the West Coast Port Shutdown Coordinating Committee will meet on General Assembly days at 5pm before the GA to organize the local shutdown, and to network with other occupations.

With these two endorsements from GAs, InterOccupy set in motion a call series that addressed the logistical and legal ramifications of conducting a solidarity strike using the tactic of a community picket line. There was, however, widespread confusion about the role of labor in coordinating these actions. 50 On websites and in public statements, union officials from the International Longshore and Warehouse Union (ILWU) openly distanced themselves from the actions and denounced the strike.⁵¹ Yet in LA and Oakland, rank and file members of ILWU as well as labor activists who sought to form a truckers union, played integral roles in organizing the date, time, and locations of the blockades as part of Labor Solidarity Committees. Meanwhile, other fifty encampments also signed on to the action including OWS, Portland, San Diego, Vancouver, Santa Cruz, and even Maui. As the momentum grew so too did the list of solidarity actions in other cities, even those without ports, such as Austin, planned to block trucking routes. There were four conference calls of approximately two to three hours in length in the lead up to the action. On the calls, budgets and resources were shared, as these actions required funding for bus transportation, porta-potties, materials for signs, and food over the course of the day. As well, legal counsel was secured in some cities through the National Lawyers Guild. Critically, discussions about specific plans and communication protocols were kept off

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⁵⁰ This blog post describes the tension between Occupy protesters and Unions: http://labornotes.org/2011/12/west-coast-port-shutdown-sparks-heated-debate-between-unions-occupy Last accessed 5/20/2015

⁵¹ For the memo issued by ILWU, see: http://www.ilwu40.org/docs/11-21-11%20CC%20Memo%20to%20All%20Longshore%20Division%20Locals.pdf Last accessed 5/20/2015

the call as facilitators reminded participants to "avoid conspiracy charges by setting up anonymous text groups between mobile phones in each area."

It was perhaps somewhat zealous of Oakland to call for such a show of support for the Longview Longshoremen because no one had contacted Occupy Longview to advise them of the plan. Previously as part of a general strike, Occupy Oakland did successfully shutdown the port on November 2, 2011 by blocking the roads with a very large march. Occupy Longview called into the conference calls and emailed InterOccupy to express their concern. They were a small group of people and could not mobilize broad public support for their encampment. They were worried that on the day of the shutdown the media would look towards them to see if the campaign was successful, but they were not sure they could even gather enough people to picket on the sidewalks. Through conversations on the phone and email, caravans of protesters organized to enlarge the numbers of visible bodies at the Longview port. Overall, the action was well received and accomplished the short-term goals of shutting down the ports. Following this, the coalitions formed through this action are still active through email and have successfully organized more port actions.

For InterOccupy, Occupy the Ports gave us a model and a template for planning future collective action. Coordinating distributed direct action between GAs meant supporting proposals for action from local GAs, broadcasting these proposals to the movement more broadly, and providing infrastructural support, whatever form it may take, to those that requested it. There were instances where individuals asked InterOccupy to support actions through our website and social media. In these

situations, there were several options. Sometimes the request would be ignored, while in other instances we would ask them to send notes from their GA endorsing the action. As requests for support became more common, we attempted to independently confirm the identity of the person making the request and their connection to a GA. As well, social media was a good support in these cases. If we could not find evidence of a critical mass supporting this idea, we would usually decide not to promote it.

By this time in late November 2011 and early December, many of the camps were getting raided and GAs struggled to find space to meet in each city. In LA, we learned of the impending raid twelve hours before it began, when the janitors of City Hall were asked not to come into work on the night of November 30th. I spent that afternoon with a fellow member from Occupy LA's Occupation Communication Committee, Colin, bargaining a price for thirty gas masks at an army surplus store in Echo Park. The Occupy protesters who were arrested during raids across the country were facing felony charges for refusal to disburse during a riot. In LA, there were 292 arrests and a significant proportion of these arrestees were held for three days in LA county jails so that there could be no re-occupation. The fences that surrounded City Hall Park, which we called Solidarity Park, stood for over a year before it was reopened to the public. Recently, the City of Los Angeles finalized a settlement with the arrested protesters for \$2.7 million.

As camps were under siege, InterOccupy's "Emerging Occupations" call was renamed the "Emerging or Struggling Occupations" call. Its purpose was to advise each other on how to handle these very intense clashes with the police and how to

obtain legal counsel. Most importantly, people in the movement were able to directly share stories with one another and form a network of trust. These were not just stories though. People's lives were upended. Some quit their jobs and left their apartments in order to spend more time in the camps. The panicked voices I heard on the other end of the line were people who sought to change the world and now they were beaten, arrested, jailed, and silenced. Many who once believed the cops were part of the 99%, reversed their positions after the raids. It was not that the 99% strictly represented an economic class position or even a proportion of the population, it was now a spirit that sought to root out injustice.

Significantly, the frenzy of the raids in November overshadowed a lot of the organizing work going on within the movement. From the Monday Night General Calls, it was clear that participants in the Occupy movement sought to address local issues on a national and global level through open discussions and collaborating on large-scale direct actions. By late November 2011, national coalitions formed, uniting Occupy activists on a wide range of social problems from college debt, the foreclosure crisis, getting money out of politics, as well as racial and ethnic solidarity. By December 2011, the relationship between the "space of places" and the "space of flows" changed rapidly as there were few places that Occupy protesters could gather without drawing the attention of police (Castells 1999). Consequently at InterOccupy, we saw a heavy influx of participants on calls.

After the spectacle of the raids, IO shifted into overdrive to provide more nuanced communication services, albeit with some hitches. Transitioning a once-a-

week general call into a series of focused discussions was difficult because of the large demand for calls and the small amount of volunteers who knew how to operate the conference calling software. InterOccupy held an in-person meeting of the Call Planning Team to devise open protocols for training new participants and enrolling more people in the rapidly expanding network. By December, InterOccupy not only provided a space communication to the displaced communities of Occupy protesters, but also aided in the large-scale coordination for distributed direct actions including the West Coast Port shutdown on December 12, 2011. Up until this point, InterOccupy worked on developing clear ties between GAs and the conference calls. The shift away from GA to GA communication was imminent. Given the capacity for network-making, InterOccupy was tasked with the question of creating a communication structure that adhered to the values of the movement. In this sense, whether we wanted to or not, we were faced with advancing the goals of the movement nationally.

CHAPTER SIX

From Proto-institutions...

The rhizomatic organization of communication across the Occupy movement presented InterOccupy with a series of daily challenges, most notably where to find trustworthy sources with verifiable information. If something appeared on Twitter and then was gaining shares in Facebook or on blogs, the comments could help decipher what was credible and whether action should be taken. Emergencies and crisis management were commonplace in Occupy encampments. While the excitement of raids in late November 2011 and early December 2011 gripped Occupy protesters' social media feeds, it was only after the frenzy of evictions that direct actions became more calculated and coordinated nationally. Due in large part to the endless meetings and countless emergencies that punctuated camp life, many Occupy protesters were unable to participate in movement building activities outside of local outreach because the very act of occupying space was itself an all-consuming tactic. After the raids, many began looking for other ways to participate in the movement, now that police and paranoia overwhelmed the space of places.

Despite having the ability to reorganize in public spaces that were not blocked by barricades or heavily restricted by city ordinances or police, Occupy protesters in New York and LA continued to flock to the original site of the camps. Suchman (2011) suggested thinking of worksites, she wrote, "centers of coordination – control rooms, emergency dispatch centers and the like – are concerned with problems of

space and time, specifically the deployment of people and equipment across distances according to a canonical timetable, or in response to the emergent requirements of a time-critical situation" (p. 24). Centers of coordination function in two distinct ways: first, they must be located in a stable site that participants can easily and predictably locate (p. 25); second, participants in other places or during other times must also be able to access and act upon the center of coordination in order to accomplish the goal of the group. The ability to take action at a distance is usually managed through the use of technology.

The importance of the camps as worksites/centers of coordination was only recognized after the raids. Not only did coordinating actions require space, time was also needed to discuss proposals and to reach consensus on a plan or a statement. The process of writing a proposal was fraught with tension and arguments, but often yielded a better outcome than the initial offer. Being present in the same place for long periods of time allowed for an editing process, where revisions could take days or weeks. It was not the case the Occupy protesters were acting as zombies constantly returning to the scene of their demise. Returning to the camp or near the site of the camp was a way to maintain social order during a period of transition and duress, but time was often short because there were few spaces that offered quiet places to discuss plans, restrooms, and cheap food. 52 Critically for movements to persist, infrastructures

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⁵² Since the 1990s, Los Angeles has debated installing public restrooms downtown. Skid Row residents have advocated for decades to have adequate access to restrooms in the area, but the City Council has done little. Most businesses in the area lock their restrooms to prevent homeless people from using them. As a result, downtown LA smells like a sewer because the space between dumpsters in the alleys double as toilets. During the occupation, the unions financed dozens of porta-potties. The city did provide access to a single restroom in a government building near City Hall Park, but locked it once the

cannot be made purely of communication technology. They also must meet basic human needs for health and wellbeing. Further, maintaining a consistent presence signaled to the public that the movement was still working even under extreme circumstances. Place was just as consequential for the functioning of the movement as the technology used to communicate across it.

The Occupy Movement was a proto-institution in the sense that the structure and process of decision-making in the camps set into motion a series of relations across groups that were patterned and diffused across a territory. Those who lives in the camp or attended it regularly came to understand its rhythms and their role within it. Customs developed around the camp, where certain areas were known for being a place to stay up late and philosophize, while other areas were for those who wanted to rest. The distribution of meals and supplies took place through the Welcome Tent, while a separate area housed the food. Most notably, the camps functioned as a place to coordinate action. Without a camp, it was difficult to organize and manage participation. The disappearance of the camp resulted in confusion over schedules, meeting times, workflows, and ultimately power began to concentrate in the spaces where the fewest could participate.

For example, at Occupy LA, two processes were at work that limited engagement with the movement. Internally, committees slowly began to roll back meetings from every day to three times a week or even less. Now meeting only three days a week, the GA moved to the west steps of City Hall, where buses and traffic

frequently made it difficult to converse.⁵³ External pressures mounted as others needed the space of City Hall Park. There were, of course, the police who were stalking Occupy LA protesters all around downtown. Displaced by Occupy LA, the downtown farmer's market filed complaints with LA City Hall were. LA City Hall is also an iconic film site.⁵⁴ Even if Occupy LA was able to tear down the fences and re-occupy the park, there were many obstacles to claiming a legitimate right to the land. It was also unclear of those in the movement even wanted to build another occupation camp. Instead, groups become more insular and the openness required by newcomers to join the movement fell by the wayside.

Becoming a target of state intervention indicated that Occupy LA shifted from a loose assemblage of those who came and went freely through the park into a recognizable organization that was accountable as an entity for its actions by the police, politicians, citizens, and media. When there was an encampment, participants could wander from group to group with relative fluidity and consult the "Welcome Tent" for the daily schedule or just observe without engaging. Now, plugging into the movement required access to already existing networks of Occupy protesters or visiting the website, which frequently had outdated information. The website often lacked information due to the absence of an internal mechanism that could funnel

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⁵³ Ironically, this area is deemed the city's "free speech zone" and must remain open at all times to the public, but no one would purposefully choose to meet there because of the extreme noise.

Some members of Occupy LA knew that a film permit for December 4-5, 2011 was granted by the City to Sean Penn's film, *Gangster Squad*. While Occupy LA was unaware of when, where, and how the permit would be enforced, we were confident that the raid would take place before this date. When Occupy protesters refused to leave the area where the film was sited because it encompassed the free speech zone, Sean Penn called my phone to mediate the situation. He shut down production so that the GA could be held in that area. Although the whole process took an additional hour to remove the filming equipment, the GA was held and no arrests were made that evening.

information from committees or affinity groups back to the Occupy LA website administrators.

Instead, many depended on seeing each other at the camp to relay information or were in close technological contact with those who shared committee membership. The raids not only revealed the value of physical space for coordination, but it also produced the need to develop coherent and open protocols for sharing information internally and with the public. The technological establishment of internal mechanisms of coordination across committees solidified roles and membership as well as gave disproportionate power to the administrators of closed meeting rooms, email lists, websites, social media accounts, and text groups as they now decided how information would flow and to whom. Moreover, without public space to share information at will, those with the passwords or administrative privileges were in control of all "official" platforms for information dissemination. Reformatting the movement after the raids was no simple feat as many people and resources were lost in the shuffle. The disappearance of the camps meant that Occupy protesters needed to become more mobile, flexible, and coordinated in ways that were not necessary when public space was readily available.

The choice of a place to occupy is always symbolic and targets a specific institution, usually one with immense power, like Wall Street. De Certeau (1984) argues that the organization of cities reflects the ways that government, corporations, and large-scale institutions regulate and manage the space and time of its inhabitants. Those traveling through the city often tactically remix the intended uses of places to

suit their needs. These tactics do not last very long, but aim to redefine the use of space and time to suit their own needs. Further, he suggests that people make places into spaces as they travel through their surroundings. A place is a point on a map that you can say objectively, "Zuccotti Park is located at Broadway and Liberty in Manhattan." Place becomes a space when you are moving through it and using it subjectively, "Liberty Square is where we occupied." When a place becomes a space, it does not just acquire a different sense of use and history, but a different value to its users and the community. While place refers to "what one can do in it," space refers to what one can "make out of it" (p. 122).

After the evictions, space had to become a tactical mode of operation for the displaced movement. While some space required stabilization so that routine and collective decision-making could occur, other spaces needed to function as a bridge between action and organization. Lastly, for virtual space to be useful to the movement, it had to be created.

In this chapter, I chart the effects of the raids on the organization of Occupy Wall Street in New York City (OWS). In mid-December 2011, I went to New York to meet with InterOccupy co-creators in person. During this visit, I also spent time attending meetings and actions organized by OWS. This chapter is largely a recounting of that frenetic experience. Here, I show how I negotiated the insider/outsider dynamics of being part of the movement, but a stranger to the local networks of power within OWS. Taking a tour through the various spaces of OWS illustrates the different styles of coordination and the limits of each. Roaming through

spaces such as an office, a university, a food court, the heavily barricaded Zuccotti park, as well as the streets, I demonstrate how different ways of arranging bodies across the space of places leads to different outcomes in collective action as well as various possibilities for virtual organization. The intention of this chapter is to sketch the complexity of the relationships between the infrastructure of OWS in order to draw out the kinds of problems InterOccupy took up on a national scale. In chapter 7, I show how the lessons learned in these centers of coordination directly impinged upon the way InterOccupy conceptualized itself and the how we reimagined the movement in virtual space.

(De)tour Guide

After the evictions, InterOccupy met in person to improve our services and to attend a conference hosted by the NYC organizers on envisioning the future of the Occupy Movement on December 18, 2011. I bought a plane ticket to NYC as did another collaborator from the northwest. Occupy activists from Philadelphia drove up, while those in NYC arranged places for us to stay. I arrived early on December 15th because I wanted to prepare for the three-month anniversary action on 12/17/2011. This action was the first large-scale attempt to occupy a park in another part of the city since the eviction on 11/15/2011. When I touched down at JFK, I immediately texted Jackrabbit to let him know I arrived and would be headed to Brooklyn to meet up. He acted as my OWS tour guide as I had done for him when he visited LA.

This was not the first time I met Jackrabbit. His brother, Paradox, was a participant at Occupy LA, who I met with almost daily in the Objectives and Demands Committee. Paradox usually came around camp in the afternoons. He was hard to miss: bare-chested in a leather vest with billowing pants, and big smile. In his "normal" life Paradox choreographs monsters and mayhem in Hollywood movies and productions. Jackrabbit came to visit him a week prior to my trip to NYC and we spent an evening kicking around downtown LA and talking about the movement, networking, and coordination. Jackrabbit, contrary to his brother's stylish bravado, was quiet and reserved. Nevertheless, at a time when paranoia ran deep across the movement, I trusted them because of the quality of our conversations and shared beliefs about the principles of the movement.

In fact, one of the most significant experiences of my time in Occupy began by making a connection to Jackrabbit. The following incident solidified the need for communication across camps as well as my desire to be part of that effort. I drove to San Diego on October 6th to meet with their General Assembly's facilitation team as they marched around downtown, eventually settling in Children's Park. We talked about the idea of having a team of people ready to keep the peace and teach horizontal democracy. Then, a week later, after moving the camp to the Civic Center and doggedly resisting pressure to leave, Occupy San Diego was given an eviction notice by the city. Occupy protesters were pepper-sprayed when they decided to defend one lonely tent in the middle of a public space. I raced down to San Diego from LA to help arrange bail funds that night. Curiously, another person, a young man dressed in a

Tommy Bahama shirt and combat boots, also showed up claiming to be from Occupy Wall Street.

He suggested that remaining members of Occupy San Diego break off into smaller "squads" and spread out around the city. He disrupted the GA several times to say that the cops were going to move in soon, but that OWS was sending "1,000 people to Occupy San Diego to fortify their camp." I was perplexed, because if this person really was from OWS, he should know how to build consensus rather than disrupt. On my way back from San Diego, I stopped at Occupy Long Beach to check in with them. There, one protester mentioned that his girlfriend at Occupy San Francisco heard 5,000 people were coming from OWS to their prevent eviction. Infiltration was afoot, but I had no direct line to OWS to confirm or deny these rumors.

I went back to Occupy LA dismayed, eager to find someone with a connection to OWS on the ground. I thought about sending an email—but to whom, and how would I know their information was reliable? At that time, most emails that were sent around occupations went unanswered for a variety of reasons, including a limited access to computers and Wi-Fi at the camps. Fortunately, Paradox called his brother Jackrabbit who was at OWS. Jackrabbit was patient with my concerns and assured me that there was no plan from OWS to send anyone to California. In fact, they did not even have 5,000 people at OWS. I relayed the info back to San Diego. The infiltrator's

⁵⁵ I realized the fatal flaw in this logic after attending several GAs in NYC. There were more

disruptions and provocateurs at those meetings than I encountered anywhere else. At the time, however, I believed that if OWS was sending people to aid other occupations then they would not be disruptive within the local GA.

response was to further divide the GA by stating that OWS was going to denounce Occupy San Diego. He disappeared from Occupy San Diego the next day and never returned. Crisis averted, with just a simple phone call.

Critically, this phone call in mid-October 2011 also dispelled the myths of organizational readiness and the network-making capacity of social media. During crisis, it was critical to understand how the Occupy movement was organized internally, what resources were available, and what strategic and tactical shifts were possible given these constraints, especially in order to combat police oppression and provocateurs. The claim that OWS was sending "troops" to California also revealed how engrained narratives about successful social movements extended across the public. Many outside of New York held the fantastic belief that OWS had the resources and capacity to monitor what was happening at other encampments and to respond quickly. I questioned if there were enough resources available to recruit and fly potentially 6,000 people to the west coast, which is why I sought out a direct connection to OWS.

McCammon (2003) makes a similar point that organizational readiness is not a good predictor of tactical change, particularly in situations where decision-making is decentralized and groups within the movement are heterogeneous. Still, Occupy protesters in San Diego wanted to believe this was true because otherwise they faced certain defeat at the hands of the police. McCammon (2003) also shows that political defeat is the leading predictor of tactical change. The successful police suppression of Occupy San Diego forced them to change strategy and tactics. Leveraging the failure

of communication channels to quickly push information from one location to another was a valuable strategy of oppression to break up smaller camps in times of crisis. For me, it seemed unlikely that OWS was ready to pull off such a well-coordinated event given that I could not even get someone in New York to return an email or respond to a post on social media. But, why wasn't anyone answering?

I contend that because channels of communication between the encampments were open through social media, it appeared that the movement was densely connected with a high degree of coordination. What was shared online, first and foremost, were keywords. There was no center of coordination or mechanism that ensured a message would be read or answered between Occupy protesters. Critically, the initial push of information about the movement through the NYCGA, Anonymous, and Adbusters included some general instructions, but not much information about how or if solidarity camps should be created in other cities. The few who took up the task of sharing information online through the NYCGA.net, OccupyWallStreet.org, and OccupyWallSt.org websites provided the platforms for this diffusion of the tactic across the US. The groups running these websites and adjunct social media accounts were quickly inundated with tens of thousands of messages, posts, pictures, videos, and donations. Unfortunately, the buzz about the movement sounded more like a busy signal for those trying to communicate across locations.

Popular social media accounts from these other movements also promoted the #OccupyWallStreet memes, which increased visibility across the online activist networks. Critically though, with few people sharing information and managing the

platforms, information about the protest was easier to obtain, synthesize, and comprehend in the early days of the encampments. The single demand leading up to the protests was to "get money out of politics." But as people met face-to-face to define the terms of the protest, the objectives varied and the number of ways to plug into the movement proliferated as well. Each person was a new node coupled with their own social media accounts acting as a hub, which plugged into the keywords they utilized to serve their own political and social agendas. Each location too had its own social media accounts and political rationales.

As more and more locations established their own occupations, they also formed new channels of communication embedded in the digital information milieu. To illustrate how densely tied the space of flows was tethered to the space of places, technologists at Occupy.net sought to build a map of the movement and found over 1500 global locations with online presences. Of course, without an online presence then an encampment could not be counted or if your online group did not have a location then it could not be placed in the map. This greatly increased the TDE of Occupy protesters as each occupation commonly had their own Facebook page, Twitter account, streaming video, YouTube account, donation page, website, photo sharing account, Tumblr blog and email addresses.



Figure 6.1 Screenshot of directory.occupy.net⁵⁶

This diffusion of locations greatly decentralized the ways in which one could jack into the movement online. Information coming from the local occupations into the information milieu brought a range of different issues to the fore. The single goal to get money out of politics evolved into a necessity to understand the range, scope, and interconnectedness of grievances. The list of grievances included ending the Federal Reserve, electing Ron Paul, addressing climate change, stopping deportation, opening social centers, closing jails and prisons, ending police violence, providing free education, stopping the wars, opening the borders, securing a free and open internet, decriminalizing marijuana, free universal healthcare, access to well-paying and unionized jobs, racial justice, breaking up the banks, taxing the rich, LGBTQA rights, forgiving all debts, and more. In a matter of weeks, #Occupy was everywhere and splashed over every leftist cause imaginable. Not only then was there a robust set of social media accounts for each location, but as time wore on each issue also joined the

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⁵⁶ Source: directory.occupy.net Last accessed 5/20/2015

fray. Now, thousands of web pages were tagged with Occupy content. As a result, looking for specific information became very difficult.

Touring OWS

Despite attempts to re-occupy Zuccotti Park, some meetings moved to an indoor "privately owned public space" (POPS) at 60 Wall St. (60 Wall), a close walk from the park. Police fenced off Zuccotti Park (also a POPS) and were no longer allowing anyone with a backpack or tent into the space. Many Occupy protesters drifted around the margins of the barricades as they devised plans to re-occupy. 60 Wall was an indoor food court frequented by local workers, from bankers to janitors, working in Manhattan's financial district. An indoor office space located on Broadway, near Zuccotti, was gifted to the movement. There was a firm cap of forty-five people allowed inside at one time. While some committees, like Finance, were stationed in the "Occupied Office," most participants were relegated to 60 Wall or to meeting (and sometimes sleeping) at the McDonald's across from Zuccotti

When I arrived on December 15th in NYC, Jackrabbit and I took the train into Manhattan to meet Badger at 60 Wall. Badger had meetings all evening and invited me to participate in the Movement Building Working Group's meeting at 6pm. Badger was a life coach who spent time in Zuccotti Park advising people on which committees were available and how to get involved. Six others who were interested in networking the movement attended the meeting. They were collectively crafting a proposal to ask the NYCGA to fund a bus trip around the northeast in order to make

more direct contact with other activists. Now that there were very few camps, regional meet ups were quickly becoming the preferred forum to network the movement. Over the course of this meeting, it became clear how poorly the movement was connected as members were charting a course for the bus route without knowing where or if other cities held GAs or having direct contact information. Because the bus tour contained training and educational components for IT services and direct action, it was imperative that they arrive in a place where the Occupy movement was already established. If they failed to make contact, they would fall back on a plan to conduct outreach in city centers. They also decided that they would use the contacts of InterOccupy to find others interested in hosting the bus tour in each location. From this meeting, Jackrabbit and I headed to Zuccotti Park for the nightly GA.



Figure 6.2 Numerous committee meetings occurring at 60 Wall

It is an understatement to say I was surprised by the small size of Zuccotti Park, or Liberty Square as OWS rechristened it. Zuccotti was about one fourth of the size of the encampment in LA, taking up one square city block in Manhattan. It was entirely paved, surrounded by metal barricades, and an NYPD watchtower loomed

over the entire space. Of course, I was thinking of Foucault and the panopticon as I gazed at the watchtower's tinted windows. There were stone benches and tables as well as several flower beds containing nothing but dirt. There were also many thin trees scattered across the concrete slab. At night, the park was illuminated by glowing tiles embedded in the pavement. At one side of the park, a small group was gathering for the GA.



Figure 6.3 NYCGA at Zuccotti Park

In order to enter, there was a small opening on one side of the park watched over by six police officers. I was already informed not to bring my backpack as police would not allow anyone who they thought intended to camp into the park. I did see police refusing entry to some, but they were still able to attend the GA by standing outside of the barricades behind the facilitators. Before the meeting began, Jackrabbit quickly provided me a layout of the camp as it was before the raid. Similarly to Occupy LA, OWS eventually and habitually recreated the city's class divisions within

the camp. Some who were present during the day and evening for media and tech meetings did not spend the night, and those who were most marginalized had to "sleep in the flowerbeds," a very uncomfortable place to be even for the most hardened camper.

As the GA convened, I felt a twinge of nostalgia for the early days of the Occupy LA GA. As the facilitators reviewed the hand signals, the differences in gestures signaled that I was in a different place and a stranger to the process. The first proposal of the night was from Occupy Farms who sought \$15K in start-up capital to begin farming sustainable food to feed Occupy protesters. Here is the text of the proposal, which was read aloud to the NYCGA: ⁵⁷

OCCUPY FARMS GA PROPOSAL

Move out of the parks and onto the farms!

Local farmers are at the heart of the economic crisis. They were our first responders, with truck loads of donated produce. Now the farmers rally again, offering 56 acres in upstate New York and expansion farms in N. Mass, Vermont, Florida, and New Jersey.

Request: The Occupy Farms working group proposes that Occupy Wall Street create a \$15,000 fund

Specifically for Occupy Farms to access for farm-related budgetary needs. Because of the distance and desire for operational autonomy, once this proposal is passed Occupy Farms will work directly with OWS Accounting in order to access the \$15,000. We propose that the following restrictions be placed on that access:

-funds can only be released for projects that fall under the 10 categories enumerated below -before any funds area released, Occupy Farms must create its own accounting process including:

 $^{^{57}}$ Text of the proposal taken from http://www.nycga.net/2011/12/proposal-for-tuesday-1213-general-assembly-occupy-farms/ Last accessed 5/20/2015

-a written process -democratic inclusion -better accounting practices, including electronic data storage and information security -complete transparency, including weekly audits & universal access to these audit results

-any request that does not comply with the above has to come back to the GA for approval

Farm Details: The upstate NY farmland includes plenty of cleared land, an apple orchard and pine trees, a

150 foot on-site well and bordering stream on the NYC watershed, a 2 story house and a future greenhouse site.

Mission: As the Occupy Farm, we are making a commitment to:

- provide wholesome and delicious food for Occupations in the region
- provide a meeting ground for camps visiting from across the world; host annual harvest festivals with music, teach-ins and craft workshops;
- promote biodiverse and organic or transitional-organic farming practices; • cultivate a stronger connection with the natural environment; • recognize the farm is located upon historical land of the Iroquois federation, and hold this knowledge mindfully as we occupy the land and benefit from what it produces: • protect & reclaim farmland such that it cannot be developed; • provide a teachable, sustainable, horizontal farming model; • establish an Occupy-affiliated Farmer's market at Zuccotti Park and all over the city; • respect the existing community and neighbors around the property; • create a model that can be replicated elsewhere in the country, including a mobile team of farmers and organizers to help establish other projects as well as literature — "Building from the Ground Up" to support other start-up projects • document this process in a complete, meaningful and transparent way • place OWS activism on the front-line of the global fracking debate • partner with other organizations like Farmers Against Hunger, the New York Coalition

Against Hunger, Food First, Occupy the Food System, Slow Food USA and others, NOFA, etc.

Open Meetings: The Occupied Farms team consists of farmers, naturalists, mycologists, bee keepers, gardeners, environmentalists, writers, librarians and more. We encourage all to come to our next meeting Sunday 5pm at 60 Wall St. We hope to take up 30-40 people on our next farm trip Wed Dec. 14th and need more people for our

other sites as well. Currently we have been meeting in person for over three weeks, have made various announcements at GA's, attended multiple Spokes Councils, and have over 50 people on our email listsery. We also have potentially dozens of farms and multiple occupations interested in getting involved in the near future.

Projects: We already completed one self-financed recon mission involving 17 people over 3-4 days.

We are asking the GA for access to \$15,000 in start-up funding for future trips and immediate projects until we become self-sufficient, which we hope will happen by January 1st. Projects include:

-Sorting scraps heaps into salvageable metals, garbage, etc... - Gathering stack/cord/split fire wood -Digging a root cellar and preparing a basement for food storage -Demolishing a barn and constructing a winter greenhouse

-Site and set up tent/kitchen/bathroom etc -Explore and draw maps and flora/fauna surveys

In order to do this, we want to be prepared to pay for: 1) -Tents, tarps and heating equip (beyond what is in SIS): estimated at \$2,000 2) - Greenhouse Construction: estimated at \$2,000 3) -Truck/work vehicle: estimated at \$2,000 4) -Transportation costs for 3 weeks: estimated at \$1,000 5) -Work gear: gloves, boots, chainsaw, shovels, spades, etc: estimated at \$1,000 6) -Food for 3 weeks: estimated at \$1,000 7) - Kitchenware and bed frames for 30-50 people: estimated at \$700 8) - Medical supplies/medic: estimated at \$300 9) -Solidarity outreach fund for other Occupy-related farms estimated at \$4,000. 10) -Miscellaneous fund estimated at \$1,000

The Occupy Farms accounting group plans to have a written process stating that we will not purchase any good, whether glove or greenhouse, without first exploring the following three options: donations, re- purposed/recycled options, and DIY alternatives, with a priority on sourcing from local communities. We pledge not to access the \$10k fund until this process is established, tentatively by Wednesday Dec. 14th. We also plan on having weekly report backs to OWS showing project progress and full financial disclosure.

This proposal was a highly contentious as the GA did not understand how funding a farm in upstate NYC was going to build solidarity or be responsive in a timely manner to the needs of protesters downstate. The sheer length of the proposal elicited audible groans from the crowd. Members of the OWS Finance Committee were present at the GA and listed several technical problems with the budget, where they required much finer details in the actual cost of equipment and who will be responsible for it. Occupy Farms responded that this was a proposed budget and that they were not going to buy anything they did not need. The Finance Committee, however, was not appeased. After an hour of debate, there were still several hard blocks against this proposal. Following this, another round of questions and answers left even more people in doubt of the necessity to fund a farming project given the more immediate needs of homeless Occupy protesters for food and metro cards.

It made sense that a competition for monetary resources would develop at this GA because there were other proposals involving large budgets on the agenda. The Comfort Working Group asked for a grant of \$1,590 for metro cards, laundry, phones, and supplies for those displaced by the raids. Another proposal from the Housing Working Group asked for \$4,350 for 150 metro cards, while the Sanitation group needed \$7,000 for cleaning materials to be used on actions to save foreclosed homes. Medics proposed a budget of \$1,100 for supplies. Finally, the group that takes the GA's minutes asked for \$129.56 to purchase an audio recorder. Occupy Farms asked for a second vote to using modified consensus, where 90% of the group must agree, but it did not meet the requirement. Later that night, the proposals from Comfort, Housing, Medics, Minutes, and Sanitation passed unanimously.

Jackrabbit and I headed to our other meeting and talked about the GA. He explained that the it became the ATM of the movement a long time ago and decisions about the direction of the movement occurred at the Spokes Council, a meeting where each working group and caucus (affinity group) met to make decisions on a range of issues. Individuals could observe the Spokes Council, but could not participate unless they were part of a group. Jackrabbit was happy to see that the Finance Committee was back to attending GAs as there were a lot of questions about money and budgets that no one else was prepared to address. Moreover, the budgets were growing faster than the coffers now that the camp was gone. Monetary support for the OWS encampment was collected both online and through in-person donations.⁵⁸ Donations dwindled since the raid, however. Additionally, the process of submitting proposals for money to the Finance Committee prior to presenting them to the GA was no longer enforced. At this stage, the destabilization of space in Zuccotti upended the established structure and processes, which made it difficult to know what was happening across the vast distribution of OWS.

We headed on foot to 50 Broadway, a high rise in the middle of the financial district. Characteristic of so many buildings in New York, the façade was cracked and covered by scaffolding. The large wooden doors opened to reveal a small lobby with a front desk. We were asked for our IDs and signed into the building. It was only then that I learned Jackrabbit's birth name. We shared a laugh over our goofy license

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⁵⁸ Setting aside the issue of multiple websites claiming to collect donations for Occupy Wall Street, the money from donations to NYCGA.net were the only contributions going directly to the encampment. These online donations and the funds given in the camp were the monetary resources managed by the Finance Working Group. Early in the formation of the committee, members agreed that who dealt with resources gave up their right to vote in the GA or at Spokes Council.

pictures. We proceeded to the office space that was down a long hallway marked with posters and pictures from the movement. Eventually, I was told that the office was donated and access was limited to organizers who were working on logistics. Art and quotes lined the walls as an indicator of the roots of the movement. The feeling inside was much less chaotic than the GA, but it had a particular kind of energy that others who were disallowed entry called "elitism." I, too, had to admit feeling of general claustrophobia. It was then that I heard Tammy's voice in the distance.

I knew Tammy's voice from InterOccupy calls: distinctively confident and clear. I called her name and headed towards the cubicles. I turned the corner and announced myself. We shared a laugh over the sheer absurdity of the office space. She already called into the weekly InterOccupy call planning meeting, so we put on the speaker to the office phone and all listened intently. There were many familiar voices on the call and we got on with an agenda focused on the upcoming face-to-face/video meeting scheduled for December 18-20th, 2011. During this call, I was largely distracted by wandering through the office space and meeting new people. Being a guest of Tammy and Jackrabbit's, as well as being a member of InterOccupy, provided me with some clout. As one person explained, "So many people come through New York looking to takeover and lead the movement with their big plan. It's fucking annoying."

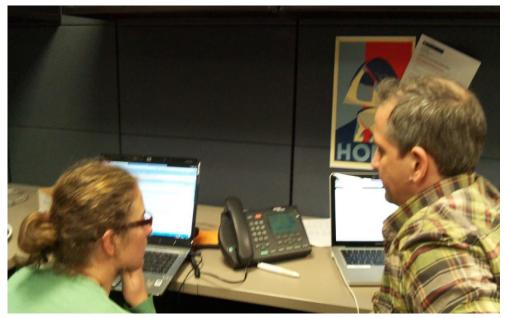


Figure 6.4 Tammy and Jackrabbit in the Occupied Office

I went into the kitchen to get a glass of water, where I met a member of the Finance Committee. As we talked about the move from the days of the camp to the office, she expressed that working in the office was more organized, but also too highly structured. She explained that the finance office is open every day from 1 to 5pm for anyone from a working group who needs a reimbursement. I asked why she was still there at 10pm. She asserted that being on the Finance Committee felt "more like being staff than occupiers." She elaborated that the work takes much more time to complete and they do not have enough volunteers - who have cleared a background check - to count money and process requests. Because I sat in on many accounting meetings at Occupy LA, I asked if I could come back tomorrow to be a fly on the wall and see how it works. She tentatively agreed signaling that I could be blocked from entry if others' disagreed.

The next day, I took the train to the Occupied Office to meet with the Finance Committee and to be briefed on the December 17th actions. I was allowed to sit in on the daily round of accounting and management in order to learn the differences between the process of allocating money in NYC and LA. It occurred to me that finance working groups across the movement may want to hold a conference call in the near future to share best practices.⁵⁹

It was now 1pm and the office was open. Three people were waiting to deliver receipts for yesterday's purchases. The protocol was that each working group was allowed a \$100 daily budget, which was reimbursed with receipts. There were some committees who also had a standing budget, like the Kitchen Working Group, which was allotted \$10,000 per week. Comfort bought socks and underwear totaling \$30. Direct Action spent \$100 on photocopies. Each receipt was documented, copied, and placed inside a folder with the committees name as well as the name of the person asking for a reimbursement written on it. Additionally, the minutes from the committee meeting detailing the purchase provided documentation that the whole group decided that these goods or services were necessary. This measure was designed to forestall any single person from acting alone. The information was then recorded in a ledger on a computer. A second person retrieved the money from a lock box.

The third reimbursement did not go as smoothly as the first two. I could tell there was tension immediately as the requestor sat down with a first full of crumpled

⁵⁹ The call between finance committees across the movement was held in late January 2012. Some callers were interested in knowing more about how to obtain a bank account in the name of the movement or finding fiscal sponsorship. Others wanted to build an "Occupy Bank" where the movement collectively shared resources. Because of this split, few shared a desire to continue with conference calls, but did exchange email addresses.

receipts. She stated that she would only deal with one particular member of the Finance Working Group and then rest could, "Go to fucking hell." She, then, trained her eyes on me. I was sitting in the back of the room with my computer open and was looking through a training packet of materials created by the Finance Group. She said, "Ma'am! Ma'am! Who are you?" I did not look up at first because I did not know how to engage her. I slowly raised my head and said that I was there to observe from Occupy LA and that I was interested in understanding how the process worked. She shot back a laugh and said, "Understand? They don't even know!" I reacted with a smile and giggled, looking back to my computer.

She flattened the receipts on to the table and said she needed \$92. The person she elected to deal with began looking them over and asked for the meeting notes to substantiate the costs. She explained that there were no notes because her group was for sexual assault survivors in desperate need. Her group, Strong Women Rules, would not divulge where they met, what happened at the meetings, or who was present. After twenty minutes, she was given the money and told to bring notes next time because they were unable to keep fulfilling requests without following the established protocol. After she left, it was explained that she comes in everyday with receipts, but no one is sure if there is anyone else in her working group. Because of the nature of the topic, though, no one felt comfortable pushing the issue.

The rest of the afternoon was very quiet in the finance office. Most of the time, people were on their computers or using their phone to access social media. I roamed the rest of the office space periodically to see who else streamed in and out. In the

back room, a small collection of people were sitting together alone, typing on their computers. I found it difficult to generate a conversation. It was just so quiet. No one introduced themselves to me and I sensed a profound disconnect from the openness of the camps to the closed office culture. One of the people at the table looked somewhat familiar. He was wearing a t-shirt of an obscure band I liked, so I struck up some small talk about the NYC punk scene. As it turns out, he and I had many friends in common and had even attended the same concerts in New York and Boston. I asked him what he was working on. He replied that he was making a literary magazine for OWS and was conversing with Ken Knabb about contributions. ⁶⁰ I followed up by asking if he goes to any meetings, to which he said that he only attends actions.

As he began to brief me on the upcoming large direct action, a member of the Actions Committee spoke up to correct him on a few details. I promptly introduced myself and asked if there was a meeting or training tonight for the Direct Action Working Group (DAWG). He gave me the details, but seemed reticent. I was very much an outsider in this space without Jackrabbit or Tammy to vouch for me.

There is only one way to describe the atmosphere in the space: work. Since the raid a month before, they had settled into working alongside one another in the office, but were weary from battles with the city, the press, the police, and each other. People who were once critical to the project of OWS had left and newcomers found it difficult to integrate even when they wanted to be helpful. While the people in the office shared a specific set of experiences that were emotional and exciting, their history was also traumatic and overwhelming. As well, the aesthetics of the space betrayed the image

 $^{^{60}}$ Ken Knabb is a prolific historian of the Situationists.

of a movement principled on openness, transparency, and public participation. If not for the signs on the walls, it would be difficult to tell this was an artery of a living movement.

I headed over to 60 Wall to meet with Jackrabbit and attend the DAWG meeting. The space was buzzing with participants as seven different groups crowded around tables to convene a series of working group meetings. A small area was reserved for food service as the OWS kitchen served vegan curry and rice to an endless line of people. Jackrabbit and I had a half-hour to spend before the meeting and he filled me in on DAWG's dynamics. Since the days of the raid, many groups would call actions that lacked strategy and led to long meandering marches throughout the city. DAWG preferred to have fewer actions, but plan them for maximum impact. It was respected that the tactical aspects of actions planned by DAWG would be kept secret until such time that it was necessary to share the details. I decided ahead of time not to ask questions.

The DAWG meeting was brief and akin to a pep rally. Times and places for tomorrow's actions were announced and members of other committees reported how they intended to participate in the action. Kitchen reported that they would bring food and snacks. Another group stated they would bring extra gloves, hats, and scarfs because it was supposed to be very cold. The OWS Library said they would bring some of the books that were not destroyed in the raid. While there were some disruptions from people who did not understand why Duarte Square was chosen or why certain people go to know the plans when others did not, they were largely

ignored. After the meeting, I connected with a few women from the Library, one of which recognized me from the office earlier that day. They added me to their email list and welcomed me to join them in transporting the library to the action in the morning.

It was apparent from my first two days in NYC that Zuccotti Park was somewhat of dead zone in terms of launching new projects or generating fresh ideas. The meetings at 60 Wall, although much more controlled, invited wider participation. It was not evident how one could start a new group or enroll in a standing working group without getting recruited by someone who was already a trusted member. As well, the NYCGA website did not have the most up-to-date information on committees, meetings, or process so it was difficult to join even for those who were highly motivated.

While both the office and 60 Wall functioned as centers of coordination, they accomplished very different tasks. For some, 60 Wall was a place to hang out, obtain food, access to metro cards, and hold conversations about the direction of the movement. Those groups who did hold public meetings at 60 Wall were also relying heavily on email and telephones to stay organized. It was a very similar to the displacement experienced by Occupy LA, except the office space in NYC provided a way to continue to circulate money through the group and provided a quiet, indoor space to have small meetings. The move into the office also legitimized the movement in the eyes of news outlets, such as Time magazine and CNN, who saw the new space as a sign of maturity. The space itself, however, bore the concerns of the donor

⁶¹ Time: http://content.time.com/time/nation/article/0,8599,2101920,00.html and

paying the \$5,400/month rent, who believed the camp was too disorganized to accomplish anything of merit.

While some where happy to move indoors in order to GSD, the space itself was a hotbed of contention. The restricted access caused numerous rifts and divided membership along committee lines. Soon a list developed that was kept at the front desk and only those with approval were allowed inside, even further fixing the idea of exclusivity. InterOccupy, however, benefited from this arrangement. We were able to enter and exit as we pleased and the connections we were able to make within those walls proved important much later when a need for funding emerged.

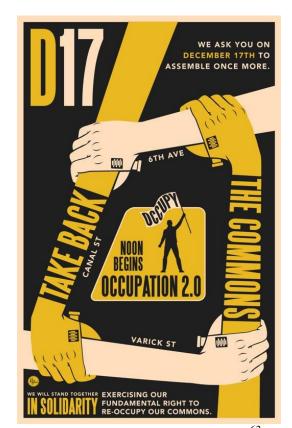


Figure 6.5 Flyer for #D17 action⁶²

 $CNN: http://news.blogs.cnn.com/2011/12/01/exclusive-inside-the-offices-of-occupy-wall-street/\ Last\ accessed\ 5/20/2015$

⁶² Source: http://occupywallst.org/article/occupy-20-d17/ Last accessed 5/20/2015

The morning of December 17th, Jackrabbit received an email asking him to work overtime. He was an IT person and web developer for a company in Manhattan. If a client needed anything, he felt compelled to work. In fact, Jackrabbit was often at work when helping with InterOccupy tasks. He would host conference calls on his lunch break, design the website and post content during the day, and consistently responded to emails within an hour. We would also chat online to discuss current events or the shape of the movement. While he was always at work, he was not always working for his employer. He assured me that he would be checking Twitter and listening to the scanners to see if anything dangerous was about to go down.

We headed into Manhattan together and I got off a few blocks away from Duarte Square to meet with the Librarians. When I arrived, the books were already on a rolling cart and a hand truck. While my strength was not needed, I did volunteer to push a block or two so that someone could take a break. On the walk, we talked about television, Hollywood, and favorite burrito places. We arrived at Duarte Square and set up a few tables with books. Others were beginning to arrive on that cold morning, greeting each other with friendly smiles. I continued to sit with the librarians and make small talk as the morning turned to afternoon.



Figure 6.6 Transporting books to Duarte Square

Suddenly, a person arrived on a bike and pulled one of the librarians aside. As he was speaking, her face looked perplexed. She balled her hands into fists and walked quickly back to the group. She announced that members of DAWG were preemptively arrested earlier in the morning. As she walked away, one of the librarians leaned in and said to me, "This is a big deal. We better have the numbers to pull this off."

"Pull what off?" I asked. He pointed to the fence behind us. On the other side was a very large open space the size of an entire city block. There were benches and some trees, but an eight foot fence encased the entire space. I got up to walk around and see the space more closely. As I headed towards the corner of the block, I recognized two ex-pats from Occupy LA. These twenty-somethings left LA to go to New York. Before they left one explained that the "gravity of history" was pulling him to OWS. We chatted for a bit and I asked for more information about the arrest and the plans for the day. They did not know much, but a person who overheard us turned to

answer. He said that the person who was arrested was coordinating the action. The plan was to have Lou Reed and Patti Smith, two musical legends of New York, play songs near the fence. As the crowd drew closer to see them, DAWG was to cut the fence away and we were going to storm the space. An arrestee, he said, was the only person with Lou Reed's phone number. There was another plan, but none of us knew it then.

As the crowd grew to nearly 1,000 we spilled out of the small space of Duarte square and into the street. A short announcement before the march began outlined the reasons why Occupy 2.0 was staged at Duarte Square. The lot adjacent to the square is owned by Trinity Church, who openly supported the movement for some time. Relations soured, though, on the night of the raid in November when protesters left Zuccotti to re-occupy Trinity's lot near Duarte. On raid night and the days afterwards, Trinity's church, which was next door to Zuccotti, closed its doors to protesters seeking relief and asked the NYPD to clear the protesters from Duarte Square as well. Saying one thing and doing another angered some of the members of the congregation as well as clergy. OWS had been operating without a stable and open space for over a month. A community agreement statement issued by DAWG raised similar concerns as the attempted expansion of Occupy LA on November 17th, where the goal was to establish an occupation that was drug free, orderly, and focused on being accountable to one another as a community.

Diego, a participant in OWS explained in an interview how this space was chosen: "I mean literally occupying another space and what space was chosen really

was influenced by the clergy that we were talking to, which they really wanted Duarte because they had a lot of beef with Trinity. And that was owned by Trinity church...

Were we played by clergy? I don't think so, but there were a lot of things to consider."

Additionally, prior to the attempted re-occupation of this Trinity space, the Rector issued this statement on December 9th commenting on the upcoming attempt to occupy as well as what happened the evening of the raid: ⁶³

From time to time people of goodwill may disagree. We disagree with those who argue that Trinity should--indeed, must as a matter of conscience--allow Occupy Wall Street to liberate its Duarte Square lot at Avenue of the Americas and Canal Street for an open encampment and large scale assemblies. In all good conscience and faith, we strongly believe to do so would be wrong, unsafe, unhealthy and potentially injurious.

Trinity has probably done as much or more for the protestors than any other institution in the area. We have provided OWS with meeting rooms and offices for them to assemble, plan and hold private discussions. We have provided pastoral services. We have provided a place of refuge and tranquility at our neighborhood center during open hours where they can rest, use computers, charge cell phones, and use bathrooms. Hundreds avail themselves of these facilities and services every day. It is one simple reflection of Trinity's inherent concern for our community and for social and economic justice which has been at the heart of the church's mission for more than 300 years.

We want to be responsive, while also being responsible, to our residential and business neighbors, partners, visitors and tenants-our entire community. There are no facilities at the Canal Street lot. Demanding access and vandalizing the property by a determined few OWS protesters won't alter the fact that there are no basic elements to sustain an encampment. The health, safety and security problems posed by an encampment here, compounded by winter weather, would dwarf those experienced at Zuccotti Park.

Calling this an issue of "political sanctuary" is manipulative and blind to reality. Equating the desire to seize this property with uprisings

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 $^{^{63}}$ Statement located at: https://www.trinitywallstreet.org/content/updated-statement-trinitys-rector-duarte-square Last accessed 5/20/2015

against tyranny is misguided, at best. Hyperbolic distortion drives up petition signatures, but doesn't make it right. Those arrested were not seeking sanctuary; they were seeking to be arrested. Trinity will continue our responsible outreach and pastoral services for all. We appreciate the many expressions of support we have received from so many in the community.

-- The Rev. Dr. James H. Cooper

Critically, the emphasis for why Trinity Church was such a generous supporter of OWS hinged on their ability to provide hard infrastructure to the protesters who needed access to indoor meeting space, clean bathrooms, electricity, and the internet. Ironically, it is the lack of hard infrastructure that made the outdoor occupation on Trinity property so hazardous in their estimation. Protesters were adamant that without consistent access to a public space to speak openly with one another, i.e. the constitutionally protected right to assemble, the movement would suffer. There was a crucial difference between this Trinity space, Zuccotti, 60 Wall, and the Office though. While the Trinity space was an open block of dirt and gravel, there was no disputing who owned it. It was not a POPS like Zuccotti or 60 Wall. To be there required the support, endorsement, and protection of the Church, which OWS did not have.

Feet were itchy to march and soon we were walking on the sidewalk away from the fence up Avenue of the Americas. The march began to snake through the city when some chose to get into the street. Large banners in the front cleared the way for the rest of us with signs, puppets, and instruments. Chanting loudly for twenty minutes, these words rang out:

"Don't just watch us! Come and join us!"

"All day! All week! Occupy Wall Street!"

"Whose streets? Our Streets!"

"Tell me what democracy looks like. This is what democracy looks like!"



Figure 6.7 #D17 march

Signs and banners read:

"Sanctuary for assembly"

"Liberate the commons"

"Our voices need space"

"You can't evict an idea whose time has come"



Figure 6.8 Waiting for the traffic light to change on the #D17 march

As quickly as the march got started, the front turned left and then left again. We were heading back towards the square. In order to get a closer look at what was happening in the front, I moved to the street to walk quickly past the crowd. The entire march was flanked by NYPD on scooters, who were attempting to coral the protesters into one lane of traffic. As I got closer to the head of the march, the pace was much more intense. We turned another left on to Grand Street and were beginning to pass the fence that closed off the empty park. I could see some commotion in the group ahead of me as we got to the center of the narrow street. The crowd paused here as banners were cast aside to reveal large homemade ladders hidden beneath the fabric. One ladder was slung over the top of the fence. A bishop, clad in a purple robe with a cross dangling from his neck, was the first into the pit.



Figure 6.9 Protesters scaling the fence

Subsequently, protesters mounted the ladder and streamed into the large space. The crowd cheered as they jumped one at a time. A second ladder was added to allow people to climb down to avoid injury on the way inside. Then one woman, dressed as a sexy Santa, stopped at the top to pose for pictures. A male dressed as Santa joined her as they waved an American flag. The crowd booed and hissed trying to get them off of the ladder so that more people could get into the area. I was pressed up against the fence surrounded by hundreds of people struggling to get a closer look. Across the way, I could see the police opening the fence to come inside. Because the ladder was causing such a bottleneck, we clutched the bottom of the fence and lifted it so that more could climb underneath. As I stood there, fence in hand with protesters streaming brushing against my legs it occurred to me that I may end up in jail for this. I looked to my left and right. I recognized no one. The pitch of the crowd was white hot in my ears. There were now many more cops than protesters inside the space.



Figure 6.10 Arrestees were paraded out of the space

The situation escalated very quickly and I was caught up in the moment. As the police began to run at the protesters in the enclosed space, those protesters jetted towards our opening in the fence. Protesters fell on their bellies and crawled to exit the area. The NYPD gave up all attempts at order and scurried after protesters in a cartoonish Benny Hill style chase. More people joined in lifting and shaking the fence as cops got closer. Soon, the entire fence lurched forward as if it might fall.

Unexpectedly, the fence reared back. I let go of the links and pushed my way through the crowd. Many were filming the action and yelling for the police to stop. A chant emerged loudly, "The whole world is watching."



Figure 6.11 Granny Peace Brigade at #D17 Action

The emotion of the crowd and the intensity of the moment were overwhelming. I crossed the street so I could calm myself. I stopped next to a group of "Raging Grannies" to check my phone. I had four missed calls from Jackrabbit, thirteen unread text messages, forty-two unchecked emails, and a slew of messages on Twitter and Facebook. I looked at the #D17 (December 17) hashtag on Twitter to see what others were saying. At that moment, it did feel as if the whole world was watching as the information stream moved rapidly across my screen.

Many people were posting links to livestream videos and offering advice on how to mitigate the effects of pepper spray. Crucially, only a few tweets were from people present at the action in the moment, who uploaded pictures for all to see. This was something I noticed consistently across actions, only a few protesters take the time to filter information from the streets onto the web in real time. It was more likely that someone may go home and write a blog post or upload video after the event. A majority of online posts during events come from those who are engaged in other ways, either by watching the live streams, listening to police scanners, watching the news if they are broadcasting from the scene, or by relaying messages they get from friends. Moreover, spreading any tactical information from the internet through the crowd present at an action was nearly impossible, save for direct text messaging.

In many ways, the online communities that form across the movement through social media channels have very different characteristics than participants who are where the action is, so to speak. As well, being part of this action revealed how information circulated across the groups in order to plan it (meetings, emails, texts,

phone calls, and even a bike messenger), while it also showed how little grasp some participants have of those same plans. Planning the action was different from doing outreach to the public, which included promoting the event on social media and handing out flyers. Even though I tried to figure out the plan and risks before the event, information was purposely kept from outsiders so that the plans would not be foiled. Of course, not knowing what will happen next during a livestream broadcast or through pictures of social media is exciting and portrays the movement as drama.

Being present and taking those risks, however, is intensely nerve wracking. The chaos of the afternoon made me wish for the kind of vision only my computer screen could provide with multiple streams of information from cameras and social media posts. At least in Los Angeles, I was privy to the plans of the protesters and the main wildcard was the reaction of police. Here in NY, confusion was the order of the day.



Figure 6.12 Night March on #D17

At around 5pm and after cuffing the last of the forty arrestees in the Trinity space, protesters reconvened in Duarte Square chanting, "This is just practice!" Much later, I realized the import of this statement for InterOccupy. In Duarte, local clergy gave speeches as others began calling for a march on the Mayor's house. A few people I chatted with were going to the bar to have some drinks and call it a day. I went on the march for an hour as the NYPD set up roadblock after roadblock preventing the crowd from making any gains on its next target. There was a short-lived plan to reconvene at 60 Wall, but those who were there earlier in the day reported it was closed all weekend for cleaning. As numbers dwindled, I decided to call it an early night so I could be in good shape for the visioning workshop.

Pace University opened the gymnasium and several classrooms for activists to hold a series of talks, panels, and workshops on the future of the movement. I attended a workshop/info session led by Lisa Fithian, a long-time activist and direct action trainer, who discussed the "pillars of support that enable unjust systems to persist." In order to breakdown pillars of support, it was critical to know which people and groups are involved in propping them up. She presented three strategies for identifying networks of power and how to leverage them to build allies, while simultaneously divesting support from those with the most power. While much of the exercise was theoretical, the discussion turned to understanding what power the movement has and how to build more. One young veteran stated poignantly that "Occupy needs to be like sand and fall between the cracks in the system, so that it cannot rebuild itself without including us."

I went to the gym for a workshop on movement building arranged by a cofounder of InterOccupy from Portland. Sitting on the floor in a circle we listened to Clay Shirky, the New York University professor and author of *Here Comes* Everybody, speak about the general structure of OWS as a small-worlds network, where groups acted relatively independently of the larger group and were united by a few highly connected individuals who worked as information hubs. We discussed how coordination across the movement needed to be both intentional and structured so that each hub had contact with all of the others. The group volleyed ideas about how to accomplish this without burdening everyone with knowing everything. In doing so, one participant suggested that InterOccupy was creating gatekeepers to the unencumbered flow of information. I offered that information could easily move around InterOccupy without going through it, but that the goal of movement building was to coordinate action through communication. This is a very different goal than sharing information for the sake of sharing, which I viewed as the purpose of social media. By positioning InterOccupy as a network of networks oriented towards actions and not issues, we were able to forestall criticisms that we were attempting to direct the movement.

After this session, I left Pace University to attend a panel discussion at the Occupy Onwards Conference held at The New School for Social Research. Opposed to the "unconference" at Pace, this was a more traditional academic conference, where the panel sat in the front of the room and the audience sat in rows nodding along to the speaker. After spending so many days in spaces that lacked this kind of spatial and

temporal ordering of bodies and events, the panel felt stale and awkward. Some audience members, who I recognized from the #D17 action, whispered between each other and checked their phones as panelists discussed the long history of social justice that preceded the Occupy Movement. As one academic declared that protesters today lack a sense of history, there was a loud exhale from another panelist who was a graduate student and a member of DAWG. After the panel, I introduced myself to the group of Occupy activists while sharing pizza provided by the conference. We decided to head back to Pace for the afternoon's visioning session. By this point, I was exhausted, yet there was something disorienting about being on "Occupy time." After having attended numerous meetings in many different spaces around the city over the past three days, I was sufficiently wrenched from any time zone and floated about as the movement required.



Figure 6.13 The Gym at Pace (numerous clusters occurring simultaneously)

That afternoon at Pace, the entire group of 800 activists convened inside the gym for a series of smaller group discussions on ten topics: outreach and growth; narrative; social and political successes/wins/impact; actions and tactics; internal coordination; accountability and decision making; visioning process; strategy; long-

term thinking; inter-occupation communications and coordination; shared values and principles; relationship building, and others. Tammy was one of the main organizers of the large session and she helped shuffle people into the groups they were most interested in. Actions and tactics was by far the largest contingent, while long-term thinking and inter-occupation communications and coordination were the smallest. With hundreds of people in the same room, the conversation was very loud and energy high. By now most of the arrestees from the day before were out of jail and in attendance.

I chose the group on inter-occupation communication and coordination. It is here that I first met Ash and Larry from Occupy Philadelphia, who both greeted me with hugs and smiles. We talked at length about what kinds of technologies would work best to share information across the movement. There was confusion about the difference between networking the movement and providing outreach to the public. Because the boundaries of membership within the movement were porous, it was difficult to tell where the movement ended and where outreach to new members began. Larry, Nate, and I had a particular vision for how this would work, given that we had been working on these problems for over a month, but listened to all suggestions. We had a difficult time explaining what coordination could look like and continuously pointed back to the Port Shutdown as a model for future action. Others suggested a range of different technologies to connect geographically distributed groups including using craigslist to notify the public of upcoming actions, to Occupy

Friendster, to create an online social network for protesters only, and to video network massive general assemblies to discuss potential goals and actions.⁶⁴

We shifted to discussing how to involve those without technological access. These strategies were outreach oriented and included using money to buy advertising space, handing out pamphlets in public squares, and sharing technologies with individuals (like a library). The conversation eventually led to the need for a 24-hour occupation where people could go to access these shared resources. It occurred to me that the Occupied Office could act as a technology distribution hub, but some from OWS were afraid that the resources would be abused and/or not returned. This reaction did not surprise me though as there was a strong inclination against using the Occupied Office at this time. Additionally, competition over the remaining resources was a source of conflict among working groups.

From the atrium of 60 Wall, to the open air space of Zuccotti Park, up to the sequestered Occupied Office, back through 60 Wall, across town to Duarte Square, through the doors of Pace University, over to the New School, and finally returning to Pace, the movement was sufficiently distributed across the city.

There was one more space I had yet to see, 56 Walker Street, where the triweekly Spokes Council meetings were held. The Spokes Council was agreed to by the General Assembly on October 28th, 2011 as a way to coordinate across committees. This proposal was the fifth time the Structure Working Group attempted to establish

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⁶⁴ Friendster was a social network used by many in early 2000s as a precursor to Myspace and Facebook.

the Spokes Council as an official body of the movement. Below is the accepted version of the proposal: ⁶⁵

Since September 17th Occupy Wall Street (OWS) has grown and inspired occupations around the globe. The General Assembly (GA) is at the heart of this movement. It provides a forum for political discussion and a plurality of ideas. It is, however, struggling to meet the day-to-day operational needs of the Working Groups and Caucuses.

CHALLENGES: (Identified in discussions in the GA, Working Groups, and Caucuses)

- Access: The GA is a difficult place for new people to find a Working Group or Caucus they want to join
- **Transparency:** There is a lack of transparency about the on-going activities of the Working Groups
- **Participation:** There is little space within the GA for Working Groups and Caucuses to effectively communicate their needs, either to the broader movement or with each other. Many of the groups doing the day-to-day work of the occupation no longer regularly attend the GA.
- Functionality: Decisions take so long to be made in the GA that there is insufficient time to address the many needs of our Working Groups, and the Working Group members are often left feeling unsupported
- **Decision Making:** Attendance at the GA fluctuates from night to night, which makes it difficult to make well-informed, consistent, and strategic decisions
- **Accountability:** There is no accountability for the spending of finances granted by the GA
- **Marginalization:** Some Caucus members do not feel that the GA is an empowering space for marginalized voices
- **Time for Visioning:** Broader political and community visions are rarely discussed in the GA because it is consistently bogged-down with logistical and financial decisions
- **Trust and Solidarity:** The GA does not currently offer its participants the time to get to know each other and build meaningful relationships

In order to address these problems, while maintaining the non-hierarchical nature of OWS, we propose that, in addition to the General Assembly (GA), we create a directly democratic Spokes Council of Operations Groups and Caucuses.

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⁶⁵ Text of the proposal taken from: http://www.nycga.net/group-documents/final-proposal-thursday-oct-27-afternoon/ Last accessed 5/20/2015

PROPOSAL:

Definitions

The Structure Working Group recommends the following definitions:

Occupy Wall Street Operations Groups (OGs) are groups that are contributing to the logistical and financial operations of Occupy Wall Street on a consistent basis. They are open and accessible for people to join and can only exclude people for either repeatedly disrupting the group's process or behaving in such a way that seriously violates the GA's Principles of Solidarity. Operations Groups must produce a written description of what they do and how people can get involved. The Occupiers (people living in Liberty Park) are defined as an Operations Group.

Occupy Wall Street Movement Groups (MGs) are groups that are contributing to the Occupy Wall Street movement. They are autonomous and may partner with Operations Groups on a project basis.

Caucuses are self-determining groups of people that share a common experience of being systemically marginalized in society at large. This marginalization may be based on, but not limited to, their real or perceived race, gender identity, sexuality, age, or ability.

The General Assembly

- The GA will continue to have the power to make all decisions about
- The representation of OWS as a whole (declarations, principles, visions)
- The relationship between OWS and the Occupy Movement
- Financial decisions related to the Occupy Movement as a whole
- Dissolution of the Spokes Council with at least one week notice prior to the proposal. This notice must be given in both the GA and the Spokes Council.

The Occupy Wall Street Spokes Council

A Spokes Council is structured similar to the spokes of a wheel: It is designed to combine large group participation (like in the GA) with small group deliberation and consensus process.

• Each group selects a "**spoke**" to sit with the other "spokes" in a circle in the middle of the meeting space, with the rest of their group sitting right behind them

- Spokes have no authority and are not decision-makers. They actively discuss all agenda items with all other members of their group who have joined them for the Spokes Council.
- Spokes are responsible for communicating any diversity of sentiments that may exist within their group to the rest of the spokes council
- Spokes rotate at every meeting, and can be recalled by their group at any time
- During Spokes Councils, individuals in multiple groups are free to sit with any group that they are a part of and to move around at will
- Movement Groups may partner with Operations Groups and/or Caucuses

Decisions & Decision-Making

- The **four types of decisions** that the Spokes Council attend to are:
- 1) Decisions related to the logistical operation of Occupy Wall Street
- 2) Approval of Occupy Wall Street budgets and expenditures
- 3) The addition or subtraction of Operations Groups and Caucuses to the Spokes Council
 - All Working Groups and Caucuses will be admitted to the Spokes
 Council that adhere to the above definitions of an Operations Group or
 Caucus and that agree to abide by the Principles of Solidarity adopted
 (as a working draft) by the GA [available
 at http://www.nycga.net/about/]
 - The only reason a group may be asked to leave the Spokes Council is for either repeatedly disrupting the Spokes Council's process or for behaving in a way that seriously violates the GA's Principles of Solidarity
- 4) Amendments to the functioning of the Spokes Council that do not alter the power of the GA
- Similar to the GA, Spokes Council decisions are made by modified consensus. An attempt will be made to reach consensus and if consensus cannot be reached, a vote will be taken. At least 10% of the group must vote against a proposal in order for it to be rejected.
- Both proposals and blocks to proposals are brought to the Spokes Council by groups as a whole
- Caucuses may delay any proposal that they think has potentially negative consequences for their caucus until the next Spokes Council, in order to give them enough time to discuss the proposal with their caucus as a whole.

Open Access and Transparency

- Anyone may attend a Spokes Council
- Anyone may participate in a Spokes Council by joining any Operations Group or Caucus in the Spokes Council and/or becoming an Occupier (i.e., living in Liberty Square)

- The Spokes Council will take place in a well-publicized indoor location
- Amplification and signing will allow everyone to follow the discussion, participate through their Spoke, and ensure that their Spoke correctly communicates the sentiment(s) of their group
- Each Spokes Council will be broadcast over the Livestream (http://www.livestream.com/occupynyc)
- Budget details and complete minutes from each Spokes Council will be posted on the NYCGA.net website through open-source technology
- All decisions made in the Spokes Council are reported back to the GA with space for questions and concerns

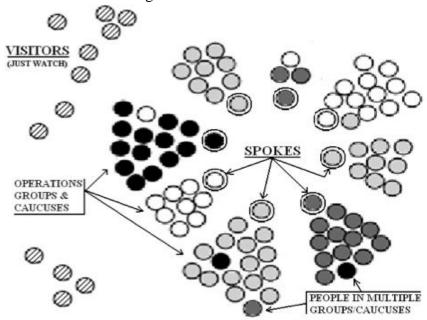
The First Spokes Council

During the first Spokes Council, all Operations Groups and Caucuses will present a description of what they do and how people can become involved in their group. The rest of the groups in attendance will welcome them through the modified consensus process. New groups may continue to propose themselves to the Spokes Council on an on-going basis.

Proposed Schedule

- The GA will meet at 7pm on Tuesdays, Thursdays, Saturdays, and Sundays
- The Spokes Council will meet at 7pm Mondays, Wednesdays and Fridays

The Spokes Council model is diagrammed here: 66



⁶⁶ Image taken from: https://peopleslibrary.wordpress.com/2011/11/10/the-library-operations-group/ Last accessed 5/20/2015

During the NYCGA discussion on the adoption of the Spokes Council model, a critical point of clarification was made about the financial power of the Spokes Council relative to the NYCGA. Minutes from the meeting describe the exchange:⁶⁷

[Question] Clarify how financial decisions are made for Zuccotti Park and for the movement as a whole?

[Answer] So to restate all financial decisions that affect OWS, different from Occupy Brooklyn or Occupy Oakland are handled in the spokes council. All financial decisions that affect the moment as a whole, like sending support to other occupations or receiving support from other occupations are handled by the GA.

Critically, this provision stripped the GA of the power to allocate resources across working groups. Because the response was clearer than the proposal itself on this single issue, the GA continued to vote on finance proposals as did the Spokes Council. At the conclusion of the GA to establish the Spokes Council, there were seventeen blocks, and 284 people in favor of it. In many ways, the two assemblies' functions overlapped, and as the winter wore on more people preferred the indoor Spokes Council meetings instead of the NYCGA meetings in Zuccotti Park. While the NYCGA retained the power to dissolve the Spokes Council at will, it could not do so without notifying the Spokes Council one week in advance. Because of this provision, it was widely held that there would be impossible to get rid of the Spokes Council in this way. Instead, those with issues related to this new governing body began attending and disrupting the Spokes Council week after week.

 $^{^{67}}$ Meeting minutes are available at: http://www.nycga.net/2011/10/nycga-minutes-10282011/ Last accessed 5/20/2015

The Spokes Council I attended at 56 Walker was very unpleasant and, according to Jackrabbit, typical. The space was a long room with a wooden floor and a stage along one wall. On this stage sat the livestream group as well as the note takers for the meeting. In the middle of the room was the Facilitation group and distributed across space, sitting on the floor, were the different working groups and caucuses identified by cardboard signs. Spectators sat in the area towards the back of the room. Initially, I was surprised that no one from InterOccupy, who was also part of OWS, was part of an identified spokes, but soon learned why.



Figure 6.14 Spokes Council Meeting (Video still from my camera)

As the meeting got going, there was a heavy debate over who would be allowed to facilitate the meeting. It was preferred that a woman who had never worked in that capacity before take on the role. One woman volunteered and a man from the Facilitation Working Group announced he would also be facilitating. The meeting began with working groups giving reports on the kinds of work they were doing and

when/where they held meetings. One report from Occupy Dignity admonished the Spokes Council for not supporting their proposal to "occupy Christmas," which they presented at the last meeting. The proposal asked for \$7,000 to cook food for distribution in Zuccotti Park on Christmas Day. Discussion ensued about the meaning of Christmas and whether the Kitchen Working Group was interested in supporting this action. Occupy Dignity decided they were going to take this proposal to the NYCGA for approval.

The next proposal came from the Town Planning Working Group, who sought to clarify how a person could be removed from the movement (including meetings, actions, assemblies, events, encampments, websites, and phone systems) if they did not adhere to the Principles of Solidarity. ⁶⁸ A long debate ensued about what it meant to be called a member and what kinds of behavior, including specific examples of bringing a gun to actions or physically assaulting someone, were to be grounds for expulsion. The main point of contention was that there remained no clear way to enforce expulsion. The representative, and possibly sole member, of the Strong Women Rules Working Group held up a sign titled, "Dispose Spokes Council Working Group." She stated that she felt targeted by the proposal and wanted it to be tabled. Others began yelling that this proposal was also targeting homeless protesters who needed compassion for their mental disabilities.

Then, as if by design, another person holds up a sign that reads "Aryan Brotherhood & Sisterhood & Allies Caucus." Positioned in such a way that the

 $^{^{68}}$ The Principles of Solidarity are defined here: http://www.nycga.net/resources/documents/principles-of-solidarity/ Last accessed 5/20/2015

facilitators could not see it, he was hiding this sign behind another one and was taunting the People of Color Caucus by showing it briefly. The People of Color Caucus stood up to tell the rest of the meeting what was happening. Lots of shouting and some shoving ensued as the sign holder was removed from the meeting. For the next thirty minutes, I stood outside in a group of people who were talking about what happened inside and why Spokes Council process cannot address racism, sexism, and other discriminations. Michael Moore, the critically acclaimed film-maker, was present at the meeting and stayed for the impromptu discussion outside. The sign holder claimed that he wanted to make a point about the problem of "radical inclusion," but nobody cared because of the way he did it. Jackrabbit and I left without returning to the Spokes Council.

As we walked to the train, I checked the tweets from the meeting made by the account @LibertySquareGA, which followed along with the discussion inside. One tweet struck me as particularly telling of the incident and the relationship of the movement's principles to the kinds of spaces available for public discussions, it read, "PoC: I don't think we decompressed from what happened here earlier. I'm not sure what to say, this isn't a race thing, this is a room thing." Later that night I listened to the livestream archive of the conversation that went on indoors, where those who stayed discussed discrimination in the movement, accountability, and mutual respect. ⁶⁹ An important point was made in stream, where the spokesperson from Strong Women Rules stated,

⁶⁹ For the entire clip: http://original.livestream.com/owsnyc/video?clipId=pla_0fead9e1-c444-48fc-a8e1-9c18f30082f7 (Transcription excerpt taken at 01:16:07) Last accessed 5/20/2015

One of the reasons why I do not like Spokes Council is who it's for. It's for the working group. [inaudible] What if some people don't feel like they want to be in a working group, but they want to have a voice? [...] Are you going to marginalize them and say, "hey shut up?" When we formed this group, we were the 99%. We didn't say "Hey you, you make decisions for us."

From off screen, a loud voice interrupts her, yelling, "You're lying! You're lying! [inaudible]."

She stutters and begins again, "I'm tired of silencing people. You know why I love GA? Because everybody is welcome. [Gesturing widely with her arms open.]

Everybody can voice their concern. Everybody went on stack at the GA."⁷⁰

Interruptions and screaming continued as moderators tried to regain the attention of the group. At this point, the video stream ended. The crucial distinction made between the GA and the Spokes Council in this quote illustrates how space is directly related to exclusivity, representation, and group structures. The NYCGA meeting minutes about the founding of the Spokes Council (SC) back in October exposes the real metrics of power at work:⁷¹

The next question and I think the last question is about why SC's aren't meeting the weekends, the question was about how to be inclusive of people who work or have limited time to dedicate to the movement?

(mic check)

Response: In this proposal we are suggesting that the SC meet Monday, Wednesday and Friday at 7pm so that people who work during the day can participate, we wanted the GA to happen Tuesday, Thursday and the weekend so that people who work during the week can participate in both SC and the GA and so that people who come in to visit on the weekend can participate in the GA but won't get bogged down by operations decisions. So, like tourists who want to see what we are all

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⁷⁰ Stack is a reference to the speakers' list.

⁷¹ Excerpt from: http://www.nycga.net/2011/10/nycga-minutes-10282011/ Last accessed 5/20/2015

about can participate in the GA but are not going to participate in the SC.

The scheduling of the Spokes Council meeting functions as a proxy for exclusion of those who work unpredictable schedules or are not permanently residing in NYC. Within this reordering of space, bodies, and time, a new center of coordination emerges with access to considerable resources, estimated to be \$700K in mid-December 2011. The NYCGA was reduced to a tourist attraction with very limited powers to distribute money and in doing so, the working groups shifted out from under the purview of the NYCGA. In the restructuring, the power of the individual to actively participate in decision-making was completely removed, an implicit effect not described in the proposal itself. The NYCGA was rendered a spectacle of its former spirit as a place where groups and individuals could engage openly with one another and consensus decision-making. This scheduling coupled with the adoption of the Spokes Council institutionalized a process of decision-making that was happening informally in other camps, like Occupy LA, where the coordinating work was shifting from the GA to committees who would prefer to decide on the direction of the movement at precisely those times when fewest were able to participate.

After the Spokes Council, like those in the visioning discussion and at the #D17 action, I too found myself pining for a space to coordinate that did not require constantly feeling uprooted by schedule and location changes; a place that provided stability of membership and enough room to shuffle into other groups without interrupting the on-going meeting. Unfortunately, going indoors allowed for

disruptions to be amplified in sound and magnitude. Moreover, it was difficult to walk away without unsettling the meeting too. From these first few days, I gathered that each location not only housed within it a specific set of functions, there were also different rules of engagement enforced by separate sets of actors. Each space bore a family resemblance to the operations of the movement when there were encampments, but the values of transparency, openness, and democracy were hampered by the physically distributed nature of the work.

This dynamic was not necessarily anything new to the movement, but it highlighted how important using ICTs had become in order to coordinate both internally and more broadly across distances and time. Video archives of meetings as well as notes published online allowed those not present to follow the changes in the movement, but required a deep knowledge of the movement's vocabulary, process, and structure. As well, knowing where to find these materials was another significant challenge. By this point, the keywords of the movement such as "Occupy," "OWS," and "OccupyWallStreet" that were so integral to allowing different groups to find one another were relatively useless as many no longer used them to tag tweets or as metadata on photos, videos, and blogs. Moreover, the keywords were used exhaustively online which diminished their ability to assist in finding specific information.

Whereas the small-worlds networks that emerged in the camps crystalized in working groups that were distributed across these different spaces, a parallel practice occurred online as routines of communication fell into place. No longer were accounts

growing in followers on Twitter or in "likes" on Facebook. The online networks reached a plateau. Administrators of social media accounts talked about federating accounts and content across the movement. Those who wanted to continue the work of managing the numerous social media accounts formed closed groups on Facebook, created closed email lists, and used several different chat services online to meet one another and discuss best practices. Competition over who was allowed to be part of each group hinged on differences in the media practices of each group and the kinds of information labor required by the platform itself.

Critically, the physical toll of living outdoors and the restrictions on access to basic necessities was an obstacle to the widespread organization of the movement across locations and internet spaces. Living in the camp meant that the fundamental infrastructure necessary for connecting to the internet was very limited. While in LA we were fortunate to have solar powered generators, there were few plugs available to charge cell phones and computers. Many opted to purchase extra batteries. As well, while mobile phones connected to the internet directly, laptops required access to a WiFi hot spot. In every camp I visited, hierarchies developed over who would have access to electricity and WiFi, which excluded most of the camp. Drew, a participant in the OWS TechOps Working Group, described the tensions in the NYC camp:

The hierarchy started forming the media area, where a lot of people had a lot of equipment and it was expensive. They started cordoning it off and having access control to that space. And it just created this -- there was a lot of things that created divides amongst all the different people camping there, but that was access to information and technology and resources. It was all on the east side of the park and it was prevalent there, and it wasn't taken care of on the west side of the park even though it was so tiny.

Obtaining electricity and the internet were not the only obstacles to occupying virtual space though as passwords to most social media and official channels of communication were either blocked or limited. Drew offered some ideas as to why the NYCGA Internet Working Group (NYCGA-IWG) required groups of people to administrate channels of communication:

It's not managed by one person because the same thing with the website happens with email addresses, with Google groups, with listservs, whatever you have. It's always going to be someone has control, and either they get upset about something, they go power crazy, or they just have to become a normal person again. And they don't know how to manage that transition.

Of course, one could always use their personal accounts, but this drastically limited the reachable audience. Further, using technology built by corporations limited the ways in which a group could be organized. For example, while people are accustomed to using Facebook to organize events and groups, as an administrator you are not allowed to access basic information about the group like the participants' email addresses. As Drew went on to explain:

So the idea that Facebook is an amazing tool, it's very useful, but there's going to come a point when it isn't. And if your entire infrastructure is based on groups on Facebook and everyone is used to using Facebook to overcome the barrier of entry to get into Facebook, which is fairly low, all it takes is one day the terms of service change to say you can't talk about Occupy on here.

If not for disagreements among members, relying too heavily on particular platforms could generate the same problems of limited access to passwords.

While in LA the struggle over social media persisted between those who were also grappling over the control of the GA, in NYC these dynamics were very different.

Because there were several media groups associated with the most prolific accounts, some who were not affiliated with the NYCGA, the groups and their accounts forked early on. The more public split occurred between OccupyWallSt.org (Storg), which was run as an affinity group, and the NYCGA-IWG. Storg operated a website and the Twitter account @OccupyWallSt, while the NYCGA operated nycga.net, occupy.net, and the Twitter account @OccupyWallStNYC. A group of overlapping administrators of Storg and the NYCGA co-managed the Occupy Wall St. Facebook group. Priscilla, a former member of Storg, described her issues with the GA:

The GA structure, I always felt was flawed, was really flawed. Especially since the fact that they wanted to do things like control all messaging that was happening with the movement. And I was like, "Who the hell are you? You're in New York City! You can't speak for someone from Alabama."

She continued:

Pretty much all of the political activity I've been involved with since I was a teenager was affinity group style. It was just, you know, you had a good idea, you did it, you know. And it seemed to me that a lot of the projects and the people who were attracted to the GA structure, were people who were attracted to hierarchal kind of organizations. And that seemed to me to be the exact antithesis to what the movement was about. But, instead of publicly trashing that, I just chose to work with people who felt the same way.

The criticism of this kind of affinity group organizing came from the fact that Storg developed into an incredible information clearing house for the movement nationally. Since there were no institutionalized ways to join this group or hold them accountable to the movement, the NYCGA-IWG among others were concerned that the most well-known website of the movement could be used to promote a political party, name leaders, and syphon donations away from the NYCGA.

In an effort to understand how Storg accomplished the large amount of information labor needed to keep the site and social media stocked with fresh content, I asked Priscilla to describe the workflow across the affinity group. Priscilla describes a typical Storg meeting:

Priscilla: You don't have debate club, it's like, you have a job to do, you're working with people who pretty much have kind of your same skill set, at least, you know, it's recognizable. And you all kind of come from kind of the same place, like all the affinity groups I'm in, are people who, like our collective professional lives equal over a hundred years. We all work, we're all working people. It's like meetings don't last three hours with us. It's like we come in, we have an agenda, we go through the agenda, everybody gets assignments out of the agenda and if you don't do it at your next -- if you haven't completed your task by the next meeting, you're not allowed to come in because obviously, you still have to do your work.

Joan: Mm-hmm. So it's run sort of in a way where --

Priscilla: Everybody is --

Joan: You could say that it feels more business-like in a way?

Priscilla: It doesn't feel more business-like, but it definitely feels more like people have like very clear expectations as to why they're there, you know. It's never become any kind of dictatorial processes or anything. It's been the people who work the most tend to have the most weight in conversations at our meetings because they have the most universal knowledge to give, you know, and they'll give it generously in the meetings, but they're not going to tell people what should happen next. It's just like, this is the knowledge I have. I give it to you, where do we go from here? So it's not more businesslike, but it gets crap done, you know.

Crucially, Storg was present at Zuccotti to describe activity in the park. Alongside this, their goal was to provide a place for the movement to coordinate nationally through forums, a message board, and a chat room. They also set up a hotline for

phone inquiries. Additionally, there was a lot of cross-over in terms of the Storg group and the NYCGA Press Working Group, who were given an email address through the Storg domain. Relations soured, however, when on October 29, 2011, members of the NYCGA Finance Working Group and Internet Working Group presented a proposal at GA that asked Storg to surrender the domain to the NYCGA-IWG. The proposal was withdrawn, but the conflict solidified the divisions. The next night the NYCGA decided to purchase Occupywallstreet.net for \$8,000 from an individual in Florida. Comparatively the price to purchase Occupy.com was \$150K, which had no content or viewership at the time. This signaled that the domain owned by Storg was significantly higher in value. Some estimated its worth at a million dollars.

Spaces of Power

Reflecting on the centers of coordination (60 Wall, Zuccotti Park, the Occupied Office, affinity group's meetings) in contrast to the spaces of action (Duarte Square and Pace University's gymnasium), I illustrated how power and resources concentrated in spaces where attendance was limited and communication channels narrowed. Significantly, the fact that OWS held it together to be able to coordinate large scale meetings and actions across all of these physical spaces signaled that they had developed into a highly bureaucratic organization replete with a division of labor, tasks differentiated by location and position, where abstract rules governed behavior and relations between participants. In bureaucracies everyone is subservient to the

rules of the organization; however, disagreements about process persisted across OWS because hierarchies developed where power was unchecked.

The "tyranny of structurelessness" undergirded the mainstream media's claims that Occupy was disorganized because reporters had a difficult time finding ways to crack open the narrative of the movement or to find leaders (Freeman 1972). This indicated that OWS was not able to self-organize in a way that openly and transparently delegated limited authority in order to inform the public of ways to get involved. In her seminal essay on the women's movement, Freeman emphasizes that power concentrates when communication networks are narrow and information is distributed among small groups of friends. She refers to this problem as the "tyranny of structurelessness" because the group is ruled by those who are not accountable to any democratic decision-making process. She suggested that while all groups are structured, the degree to which these structures are articulated formally is what will forestall elites from taking over (Freeman 1972). Moreover in situations like democracy movements, elites do not seek power, but gain it informally by knowing the processes through which decisions are made and using their communication networks of friends to lobby for particular outcomes.

Whereas some were using the confusion about space and decision-making to rearrange networks within the movement to meet their own ends, reminders to "check your privilege" were intended to call attention to the imbalance of power across groups. Because there were many decentralized centers of coordination at this critical point in the maturation of the movement, competition for attention, resources, and

legitimacy had splintered and scattered an already fractured group. "Articulation work" as Star and Struass (1999) define is work that "gets things back on track" (p.10). If the proto-institution of OWS was to endure, then much work needed to be done to lay the tracks. It was imperative that InterOccupy avoid building a bridge to nowhere as protesters were already exhausted.

For example, while 800 people attended the grand visioning event, it had no effect on organizing the movement towards specific ends at the workshop's conclusion. Many returned to the already established groups and dug into work that was relatively self-selected. Freeman (1972) warned that without a formal system for delegating tasks the work may not get done adequately. For the Occupy Movement, lack of clear mechanisms for delegating tasks often resulted in redundancy. While redundancy was helpful in terms of spreading the online channels of communication, it was annoying in the camps and during meetings. Redundant networks online meant it would be nearly impossible to take all the nodes offline at once, but it also meant seeing the same information numerous times both on social media and at meetings. Participation stalled and frustration developed at times when conversations and meetings were repetitive and ceased to GSD. Wasted time in meetings became a popular criticism of the movement. Particularly, the split between the NYCGA and the Spoke's Council produced such confusion and redundancy that no one I spoke to could adequately explain their relationship to one another.

While the camps reorganized the networks of activists in each location, the density of the friendship networks developed within the camps threatened the potential

future of the movement. In order to overcome this, calls for transparency in decision-making required clear protocols for coming to consensus, re-establishing the meetings and spaces where decisions would be binding, as well as formalizing the bureaucratic processes within committees and working groups where the schedule of meetings and their records would be databased online. InterOccupy was one step ahead of the GAs in formalizing these processes, where notes and recordings were shared as a matter of transparency. If the Occupy movement functioned as a small-worlds network, as Shirky outlined, then InterOccupy would have to address the problems of concentrated power in the hands of those who hold the most information, while also mitigating redundancy across the networks.

Most importantly, with the disappearance of the encampments also went the social institutions that made the movement feel exciting, fresh, and communal, if only in that space. If the camps were like religion, then in their absence we were preforming rituals. If the tent cities promoted a sense of kinship, then the isolated apartments we returned to after the raids bore the early signs of divorce. If the GA was how we envisioned doing politics, then without the public square there could be no citizen. The places we occupied, the streets we took in protest, and the gains we made in the hearts and minds of the public were real actions with real rules in a real space with real consequences. To memorialize it as anything less or to call it spectacle is to insult those who were jailed for believing in the counter-power of the people to redress the wrongs done by corrupt politicians and greedy corporations.

While the West Coast Port Shutdown was a significant accomplishment for the movement, much more work needed to be done to restructure communication both within regional assemblies and across the national network after the raids. The CoCs engaged each other on conference calls and through email, but the purpose of it all fell into question. Others too found themselves feeling displaced and seeking a way forward. It was widely felt that taking a break in December could either reboot the movement or dissolve it completely. What the occupation did to form new ways of thinking, speaking, and acting presented a challenge for those returning to "normal" life. Because the raids were the first time in which many challenged the state in a significant and physical way, there was a sense that the movement was suffering from a collective post-traumatic stress. Interacting with family over the holidays and facing challenging questions about the "goals" of the movement was difficult as words failed to describe the energy and transformative process of the movement.

In many ways, InterOccupy blossomed as more and more protesters sought out broader connections within the digital network in order to avoid the isolation of the holiday season and the disorganization of scattered meeting spaces. Yet, the question of the need for a twenty-four hour occupation permeated across the movement. As some formed strong bonds through conference calls, social media, and email threads, were the camps necessary? What other tactics were available? I also found myself drifting closer to the InterOccupy project and further from Occupy LA, as the once brilliant crowd dwindled to a small group riddled with paranoia, distrust of cops, and pitches from opportunists.

Lastly, while the keyword of "Occupy" was instrumental in bringing people into the public space of protest, its sprawl across the online networks diminished its power to connect disparate nodes. From #OccupyWallStreet to #OccupyWallSt to #OWS, as networks online solidified, keywords became shorter and shorter until they eventually stopped being used as a network-making activity. Bennet and Segerberg (2012) outline the difference between the logic of collective action (organizations decide on the strategy and tactics to reach a goal) in contrast to the logic of connective action (digital media is shared to promote participation as a form of personal expression). They write, "The familiar logic of collective action associated with high levels of organizational resources and the formation of collective identities, and the less familiar logic of connective action based on personalized content sharing across media networks. In the former, introducing digital media do not change the core dynamics of the action. In the case of the latter, they do" (p. 739).

In this sense, the disappearance of #Occupy as a keyword from social media posts did not indicate the death of the movement, but rather signified a transition in the use of digital media from connective action to collective action. To be clear, sharing information through these keywords did not cease entirely, but the movement's networks and membership worked themselves out enough that people could communicate directly. Critically though, social media could not do the coordinating work necessary to produce collective action in this way. Just like mistaking process for democracy, confusing social media for a coordinating infrastructure were now lessons learned. It was time to try something different.

CHAPTER SEVEN

...To Virtual Organizations...

If the platforms available did not suit the needs of the Occupy Movement, what other technologies needed to be built or leveraged in order to allow Occupy protesters to engage with one another? InterOccupy saw the need for dependable, open, and distributed channels of communication that acted as centers of coordination for the movement. The restructuring of OWS that took place after the raids showed that different forms fit different functions. By December 19th, InterOccupy hosted fifty-five separate conference calls connecting groups on topics such as media, IT, direct action, committees of correspondence, facilitation, emerging and struggling occupations, as well as several regional calls. While we tried to establish protocols for adding new call topics as well as training for new volunteers, it was difficult to vet the call requesters and determine whether their interests were personal or the consensus of a camp.

Without verification, InterOccupy believed that the movement could be led by media savvy organizations who were already positioning themselves to steer the movement after the raids. Particularly, the group MoveOn were adopting the language of Occupy and ramping up for the "99 Spring," a series of direct action trainings to be held in April. Additionally, SEIU spent hundreds of thousands of dollars to fly Occupy protesters to DC for a "Take Back the Capitol Rally" in early December 2011. When Occupy protesters arrived in DC to find that the Occupy DC camp had no

involvement in the plans and that the SEIU built a mock camp on permitted land, the activists left the site to join Occupy DC. Despite all of this, InterOccupy was able to leverage the networks of networks formed in the camps, while simultaneously querying networks of friends to legitimate information as it came under our purview.

On December 19, 2011 in a sunny apartment in Manhattan, InterOccupy gathered together for the first time face-to-face. Andrea arrived first to open the apartment which belonged to a friend of hers, a fifth floor walkup with a large living room. It was my first time meeting Andrea, who worked in the entertainment field. Our small talk revealed a mirror of experiences. We both grew up in small towns in the suburbs of Boston and sought refuge in the arts as the children of working class parents. While she is Italian, I am Irish, but I was raised in towns steeped in Italian traditions and culture. Almost instantly our harsh Northeastern accents rose together. We laughed when I made a joke about her hometown's most prolific employer; a state prison. Other members of InterOccupy started to trickle in. Ash, Larry, Nate, and Tammy took up spots across the room. Another called in through google voice. Others from Portland, Baltimore, and OWS joined too as we readied the coffee, the WiFi, four computers, a video camera, silenced our phones, and chatted about the crazy days in the camps. Having similar experiences within the movement provided for instant camaraderie within the group.

We convened the day's meeting as Clay arrived to give a much more detailed review of the networks in the camps. We used the OWS Kitchen to model of how one part of a network affects all other aspects in that location. Then, Clay diagrammed for

the group how different networks look and provided a cost benefit analysis of each. Clay's philosophy of networks is based on the physicist, P.W. Andersen's, argument that "more is different." Small networks of friends can make complex decisions because they are familiar with one another and share common bonds; however, if one more person is added to the group then decisions become exponentially more difficult to make. Organizations, though, tend to formalize into hierarchies in order to avoid the difficulty associated with group decision-making. Hierarchies are useful in instances where communication from the top-down is necessary, but hierarchical organizations cannot easily maneuver in crisis situations. Additionally, information moves slowly from the rank and file into top positions.

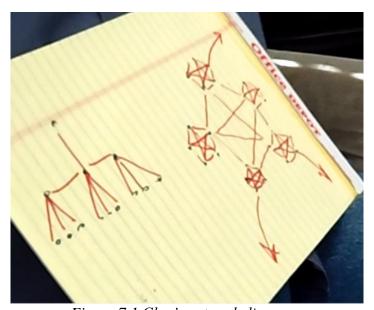


Figure 7.1 Clay's network diagrams

On the right side, he outlined a typical hierarchical organization with which many of us were already familiar. The black dots are people and the red lines denote channels of communication. On the left side, he presented a "scale-free" network that

operates "implicitly" across the OWS. In this model, "loosely connected clusters of densely connected clusters" coordinate at multiple stages to form an organization. For example, working groups come together as densely connected clusters, where one or two people are also loosely connected into other working groups. Organizing this way results in limited vision across the organization and difficulty reaching the entire group's goals because work is not directed. His diagnosis was that InterOccupy needed to establish a way to "move information around" and reach consensus so that "not everybody has to know what everybody else is doing all the time or saying we need to proxy executive function to one or a handful of people." The limits are intractable though as small groups can reach consensus in a short time, but "past a certain point there is no amount of time you can invest to get complete consensus." The scale-free or small-worlds network used in GAs was a good organizational model in many respects because it avoided the problem of "inaction that can paralyze a hierarchical organization." At a medium scale, this kind or organizational model can be both "satisfying and effective" depending on the goals of the group. As the size of the group changes, so do the goals, the time needed to obtain consensus, and the outcomes felt by the participants.

Staring at Clay's network map, I thought about the spaces of Zuccotti Park, 60 Wall, Duarte Square, and Pace's gymnasium in contrast to the experiences of the Occupied Office and the conference at the New School. The policing of public space was an effective strategy for crushing the movement. By limiting the amount of public space available to citizens, states prevent the agora from materializing. If what is left

is too small of a space, then only small groups can coordinate. If the space is limited in terms of time, place, and manner restrictions, then continuity of action is restricted. If one were to take overhead photos of the Occupy Movement congregating, Clay's small-worlds map replicates exactly how participants distributed themselves across these physical spaces. In the cramped room of the Spoke's Council, this configuration was not possible. As the movement reorganized across many spaces, it replicated the problems of coordinating actions through the internet. As OWS (a group and a packet of information) shuffled between the spaces online and offline, many were lost and only a dedicated few were gained. The Occupy Movement needed a dependable center of coordination that supported a network that expanded and contracted based on the goals of the day.

In order to overcome the obstacles posed by limited physical space, the major issues that InterOccupy were going to have to solve quickly involved understanding the limits of consensus decision-making and how to scale camps to a national movement. The new team member from Occupy Baltimore relayed that in their encampment, they dispensed with the hard block as part of their consensus process because it did not resolve the issue at hand. He saw the problem of coming to consensus as one of information distribution across the assembly, he stated, "It's about information too. If one person has more information, that might make them block and be able to explain themselves to others." Some were concerned that the reason OWS became ineffective was related to the size of the GA and this led to the inability to appease all concerns. We took these insights as a course of action for network-making.

If information could be distributed between nodes and size could be managed, then an informal consensus could be reached on conference calls.

Clay flagged a major danger: blocking consensus produced inaction.

"Consensus block," as Clay called it, needed to be addressed because OWS had both internal dissent and external enemies. Citing the history of the Free Software

Movement, he described the process through which disagreement produced new work as groups forked. In this sense, creating consensus required the ability to allow competition between ideas and groups to flourish rather than stall activity. Our refusal to collaborate with Occupy Coordination returned as a useful example of how two groups could coexist, but also ignore one another. It was decided to drop concerns about connecting into other networks and concentrate on populating a network of our own.

We also considered that consensus was going to be useful in some instances, but like the Free Software Movement, the Occupy Movement promoted autonomous action without permission. As a point of reflection, this was indeed the main way work was accomplished in the camps, but it was also the reason why some were angered about what was done. For example, once a group stopped acting like they needed permission to take action, for instance those who staged the expansion of Occupy LA, others were upset that their health, safety, and freedom were put at risk by the secrecy of the action. Furthermore, it was viewed as an explicit betrayal of trust and fairness to act without permission because the group who attempted the expansion was comprised mainly of people who knew the GA system well and participated in it nightly. It

seemed to be that blocking consensus was different from breaking consensus, especially when it was agreed that proposals would pass through committees for revisions.

While Clay was right that Occupy protesters resolved issues of blocked consensus by taking initiative, the real difference between his comparisons to the Free Software Movement were the possible outcomes. Whereas the Free Software Movement could split relatively safely without threat of injury or imprisonment, the stakes were different for the Occupy Movement who faced close scrutiny from police, FBI, and DHS. Permission, or at least notification, was necessary in movements when the risks were high. This is not to say that providing conference calls posed any particular threat for InterOccupy. Yet, facilitating calls for the West Coast Port Shutdown made me aware that some discussions are dangerous.

As the meeting continued, we discovered that we also needed to define how these models related to our own structure of communication within InterOccupy as an organization. Until this point, we had not considered how we should make decisions collectively as we defaulted to the model of the GAs. As a matter of fact, we were using the same mechanisms to communicate in that apartment without discussing how we would interact. We were busy taking turns talking, hand signaling, asking each other to stay on topic, and taking notes. We also did not know, in any reflexive way, how our own biases would factor into how we molded the process and used it to facilitate calls. Significantly, we had not run into a problem that required the use of hard blocks. Decisions about protocols tended to be made through email as they arose.

Providing reasons, not rules, was the main way in which consensus was reached in our small group. We added to our agenda "internal operations" as a reminder than we too needed to get organized.

By this point, we were ardent that InterOccupy was not going to make decisions that represented the movement or position our services in such a way that participants in calls could make those claims. Larry wanted to move on to the topic of how to build GA to GA communication, while others were still reticent about that being the main focus of this work. Nate spoke of bringing new people to the movement and having them learn the GA process through participation on the calls. I was most worried about figuring how to get the "right people on the calls" - i.e., people who have important information to share and can also report back to their location with information from others. Tammy was concerned with groups acting in the name of the movement and using the calls to advance their own projects. Taking these matters together, we decided to fashion a mission statement to be posted on the website that limited the scope of our work, defined the populations were served, and described the politics we endorsed.

Scaling the camps to a national movement was another issue entirely. Because InterOccupy's design centered on CoCs to connect nodes together, the puzzle was how to distribute power across nodes to maintain horizontal communication. It was expected that those in NYC would hold disproportionate power in decision-making relative to smaller cities, so to mitigate these effects we needed a plan to maintain our own integrity as a horizontal communication system. It was difficult to tell what

horizontal meant to each person in that meeting, but it seemed to denote shared governance within InterOccupy as well as concerted attention to the content of the conference calls.

Andrea later remarked, "I didn't know it was an anarchist movement. I didn't know horizontalism from Adam. It sort of made my eyes roll." Andrea was located in NYC, but never attended GA and rarely went to meetings. Those at OWS were always very careful to keep their work with InterOccupy separate from their organizing in the Movement Building Working Group, except for in the instance where the NYCGA was used to issue a proposal hailing InterOccupy as the main communication channel between GAs. As well, others in Movement Building were completely disengaged from the InterOccupy project and took up other tasks like regional networking across New York City and Brooklyn. Even though we were sitting in an apartment in New York, it did not seem to matter to any of us where each person was coming from. Reminiscent of Priscilla's insights about the affinity groups, we were each growing less and less attached to our experiences in specific locations and getting excited by the possibility of working together on something new.

While we were not aware then, we were forking the movement with a new platform of communication; one that straddled the virtual and physical in real time. The InterOccupy platform would provide packaged infrastructure services using ready-made technologies available to us from all manner of organizations and corporations. Much of building InterOccupy was a technological puzzle that depended in large part on the skillset of our call planning team and our collective knowledge of

what platforms were preferred by protesters. We had a good grasp on what did not work in terms of sharing information both online and in person. Specifically, the social media that brought us to the protests failed to help us collaborate in shared projects across the movement. By the time of this meeting, we had a general sense of the problems of coordination, information flows, and co-option facing the movement. It was not a perfect vision in any way. As Jackrabbit put it when describing OWS, "we were making it all up as we went along." In that space, we talked deeply about our desires to create a place where people could discuss and plan for a more democratic future.

We were not opposed to using any means available to do such a thing, but we also knew that depending too much on one platform to network the networks would ultimately be our demise. The social networking applications that were already in place were disappointing in terms of how we envisioned the movement coordinating. While it would be possible to design an entire networking hub and spokes system using Facebook groups, we would lose total control of the network, its design, and contact information. Twitter was far too restrictive in terms of the word limit and the structure of conversation. Switching entirely to a new social media/networking platform, like Diaspora, was also criticized as it was difficult to move populations from platform to platform. Moreover, some corporate networking platforms were intentionally blocking content related to the Occupy Movement. On Facebook some

groups, pages, and events disappeared without any explanation. Yahoo's email service admitted to filtering emails that contained links to OccupyWallSt.org as spam.⁷²

Many Occupy protesters claimed that Twitter was colluding to prevent movement related hashtags from trending, but this claim is most likely explained by the algorithm Twitter uses to signify trends. For a hashtag to trend, there must be a drastic spike in activity, which is usually tied to a major public event. Because #Occupy and #OWS were used with some consistency, the usage graph was relatively flat over time. During the raids, however, location based tags surged in popularity and produced trends. Ironically, as a user who followed many hashtags related to the movement, if a tag like #OccupyLA was trending, it was useless in terms of finding reliable information about the event. Most of the information was an avalanche of redundancy that made the information stream move so quickly that it was difficult to spot posts with new information in real time. It is akin to opening your email to see that you have 500 messages coming in every minute, but 499 of them say nearly identical things. In that moment, you switch to more direct forms of communication, if possible.

It was widely recognized, among our group, that we were unfit to design our own software and online social network because we were not developers. As well, the social network, BuddyPress, integrated into the NYCGA website was full of trolls, whose main goal was to sew dissent. We did not need to replicate these social networks to discover that they were not going to fulfill the needs of our group. One

⁷² Source: http://www.deathandtaxesmag.com/143883/yahoo-allegedly-censored-occupy-wall-street-emails-claims-its-just-a-spam-filter-glitch/ Last accessed 5/20/2015

essential affordance that face-to-face and voice-to-voice networking provided was real time speaking and listening, which resolved many problems before they spread across groups. The issues of autonomy and control drove technological decisions made by InterOccupy more so than any specific knowledge about technology itself. The initial rejection of the CiviCRM provides a good example.

Conversation shifted to the tools made available to InterOccupy from Occupy.net, particularly the CiviCRM, a constituent relationship management software suite designed for use by non-profits. CiviCRM provided the ability to customize email lists based on input from the consumer. For example, InterOccupy could develop a form that asked those who wanted to sign up for the email to list anything about themselves including name, location, interests, affiliations, skills, resources, and so on. Targeted emails could be sent to constituents based on those identifying fields (for example, their location, or areas of interest). Organizing groups this way would lessen the burden of unrelated content reaching disinterested people as well as provide an index of participants that could be shared. The CiviCRM, though, required a lot of technical know-how and secure server space. Up to that point, InterOccupy was running a very basic WordPress website through a corporate hosting service.

While the CiviCRM used by OWS was built in a way where they could partition it for others to use, Ash from Occupy Philadelphia raised a serious concern. If we were to move InterOccupy's email list to services owned and operated by OWS, it would position OWS as a "master of puppets" because they would have access to

our network's contacts. He strongly favored a system, like a telephone book, where people could look up other participants, see their affiliations, and contact them to self-organize.

Tammy from OWS interjected: "Right now, it might now be a problem to link with OWS, but we don't know where this is going to take us and what we set up now is going to impact us down the line." She wanted us to "encourage people to talk to each other," so phone numbers were also an important part of thinking through what InterOccupy could provide that other network-makers did not.

Another participant from OWS agreed with Tammy and Ash's assertions and encouraged the group to think about services that InterOccupy could provide without involving OWS unless, "we needed more than just an email list." Moreover, unless we were going to be planning events and asking for donations, CiviCRM was "overkill for what we are going to do with email lists." We were now four hours into the meeting and InterOccupy had finally become "we" and "us." It was eventually decided that the contact list would be a public directory, where the information was formatted in such a way that it would require human labor to cut and paste each email address in order to do a mass mailing. This solution provided the openness we desired, free of bottlenecks, but was perhaps the least technologically sophisticated approach. That morning, we settled the long-standing issue of what to do with the contact lists and through that we also demarcated how we would connect into other groups strategically by retaining autonomy through technological control of the platform.

In the afternoon, we turned to finalizing a mission statement. Drafts of the statement bounced around our inboxes for weeks until this afternoon. We decided to tackle this after lunch, as one participant noted, "The mission statement is the foundation on which internal coordination and conflict can be resolved." We began by reading through drafts from our emails and thinking about the keywords we would like to see in the final edit. We agreed to keep it short and finalized this statement after a two-hour debate: ⁷³

We at InterOccupy seek to foster communication between individuals, Working Groups and local General Assemblies, across the movement. We do this in the spirit of the Occupy Movement and general assemblies which use direct democratic and horizontal decision-making processes in service to the interests of the 99%.

Nearly every word of this was under review at some point. "Foster" originally read as "facilitate," but that denoted too much control over the network. The choice of including "individuals" as a unit of collaboration irked some from OWS who were privy to the debates about the GA versus the Spokes Council as platforms for individuals or groups respectively. They relented after Nate and I insisted that we provide a space for those who could not participate in working groups or did not have geographical access to assemblies. When we settled on "across the movement," it connoted to us the worldwide movement towards democracy. The international movement was different from "the Occupy Movement," which we marked in the second sentence as both a democracy movement and an ethic. Saying "in the spirit of the Occupy Movement," specified that we were free to define the principles separately

⁷³For the mission of InterOccupy, see: http://interoccupy.net/about/mission/ Last accessed 5/20/2015

from the actions. This was a sticking point for those in OWS who were upset with the re-occupation attempt on #D17. Thinking internationally, we debated using the term "squares" in place of general assemblies, but were unsure to what extent "squares" resonated with movements in Europe. We settled on using the terms "direct democratic," meaning no representatives, and "horizontal," signifying an even distribution of decision-making power, after ruling out "participatory democracy" because it seemed redundant. Lastly, we bandied about the term 99%. Some felt that the term was "cheesy," but eventually included it because it indicated leftist politics. Discussion ended when Tammy asked, "Can we take a break?" and we all realized it was 8pm.

The next morning, we jumped right back into the agenda. We began by establishing best practices and protocols for internal administration with several subgroups, discussed the need for finances, outlined clear criteria for call requesters, and thought about how to bring in new people to the organization. InterOccupy was able to put horizontality at the forefront of its mission to foster coordination across general assemblies and working groups by demarcating the kinds of claims that could be made about the work accomplished on the calls. We sought to encourage collaboration through the conference calls, but did not want to inhibit participation across the movement by encouraging the outcomes of the calls to result in statements about the movement. In our view, the InterOccupy network was designed to expand the way rhizomatic plants mature, with growth spreading out, rather than up into a single organization. Therefore, we decided that we would refer to the call planning

team as InterOccupy and each call series would be a separate entity, free to define themselves as they saw fit. The only call we would 'host' as an organization would be the Monday night general call. All other calls would be titled according to the content.

When we turned to discuss our internal structure and how it would change after the meeting, many of the questions about how we are structured now were fielded by Andrea. Over the course of yesterday's meeting, she sat quietly taking notes, keeping stack, and making sure those who were video-conferencing into the meeting were connected. I'm unsure if anyone noticed that she had not spoken much aside from asking a few clarifying questions. The shift to querying her work practices illustrated that she was shouldering much of the information work on her own. Andrea volunteered for the task of answering the emails back in early November 2011. If anyone wanted to get in touch with InterOccupy, they would email Info@interoccupy.org, the only point of publicly shared point of contact. If she could not answer the email or was unsure of how the group would want to answer, she would forward it to InterOccupy's google group, where we would collectively cobble together a response.

Her presence points to important lesson about infrastructure and visibility. Star and Strauss (1999) show that there are benefits and drawbacks to formalizing work flows. With Andrea acting as a filter, only significant issues were brought to the attention of the entire group. This created a situation where much of the work that Andrea was doing to coordinate the movement was relatively invisible to the rest of the group. In this sense, others were free to do different tasks, like facilitate calls and

act as CoCs in their own area. Andrea describes a typical day where working for the movement is part of her routine:

I'm a writer and freelancer, which is good because my schedule can kind of be what it needs to be. And I can answer emails while doing work. But, when I write, I'm writing and I don't do anything else. But when I'm at my other job I can sneak off and sort of do stuff that has to be done. But I have a sort of schedule which is like wake up in the morning, do my 12-step shit, I write, I take the dogs for a walk, I send out the emails for the phone calls for that day. And then I just peel through my emails and try to answer everything that I can get done. And then if there's anything that has to be done that day then I finish it, then I go to work. Then I come home, do the dogs again, peel through the emails some more, until I can't stand it anymore, then I go to bed. At that's essentially what I do, seven days a week [...] I wake up to 80 fucking emails every morning. And that's just before nine. And then there's the whole rest of the day.

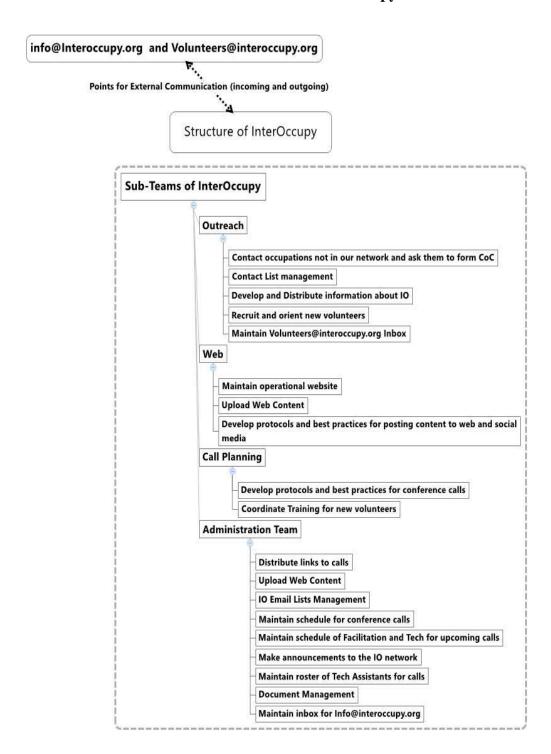
When Andrea speaks of "my emails," she is referring to InterOccupy and her own personal emails. Andrea's experience of trying to plug into OWS was fraught with confusion as she attempted to join different working groups, but felt like an outsider. Moreover, even though she sent emails and tried to get involved in other ways, she either received no response or felt the brush off. Taking up the email was a personal attempt to fix something she felt was wrong within the movement's strategy of engagement. She vowed to "monitor the email very closely" to ensure every person was answered.

There was a difference in what we thought she did and the actual work she accomplished. Every few days an email would go out that listed the upcoming calls with descriptions, registration information, and links to the agenda. All of this information was put together by Andrea who contacted the call requester to get the description, set up a time, and created the shareable document so that the call requester

could add their agenda. She would then find someone to do the technological assistance of running the conference call. If she could not find someone, she did it herself. After the call was finished, she took the notes document and posted it on InterOccupy's website and downloaded the call recording, which she also backed up in an online cloud that she paid for herself. If the call requester needed an email list generated from the participants on the call, Andrea would set up the list serve and read it in case of problems. As each new call series came into being, she would go through the same series of steps.

It was a lot of work for one person, as one participant in the meeting stated, "Andrea is doing heroic stuff. Who she is and how she presents InterOccupy is wonderful. I want to get some tasks off boarded to the IO call team. I love the idea of a person to do the uploading of things from the calls onto the website. Get some off Andrea's plate." Doing this kind of work, gave her a particular sense of the movement and how each piece of the infrastructure connected into another. Following the tasks Andrea laid out before us, we started to divide the work as diagrammed here:

Table 7.1 Structure of InterOccupy



Each subgroup was assigned its own email list, so that not everyone across the Call Planning Team needed to read every email. The Thursday night call was repurposed to provide support for the internal coordination across these subgroups, in place of generating an agenda for the Monday night general call.

We were also unsure how much it would cost to run an organization like this one for any amount of time. As of now, we each paid our own way for our personal cell phones, WiFi and used many of the free calling capabilities of the internet to facilitate calls. On the one hand, we "worked" for free as InterOccupy. Yet on the other hand, most of us "worked" at paying jobs and leveraged the poor oversight of employers and the bandwidth of workplaces to make InterOccupy what it was. We knew that server costs, domain name registration, and other incidentals were going to come up. Jackrabbit and I volunteered to create a budget and email it to the group. We paused to think about how incredible it was that we could do such things while keeping the costs so low. This was going to change in the near future though as the network grew exponentially and we needed more reliable technological infrastructure to support our activities.

Following this, a debate ensued over "who" was allowed to request calls from InterOccupy. We settled on supporting local assemblies, where CoCs would verify that the call requester was an Occupy protester. This meant that any participant could ask for a call and no one agenda was given priority. For example, when a member from OWS Kitchen wanted calls in order to make a cookbook with recipes to feed thousands of people, we lent our support because it was an initiative that came from a

participant. Additionally, by placing the responsibility for call themes and agendas on the call requester, none of the content fell under the jurisdiction of InterOccupy. The content of the calls, therefore, was up to the movement itself with the goal of aligning strategy and actions. With this new protocol, we could support issue based calls, identity groups, regional work, and distributed direct actions. We also added a twenty-four hour rule to fulfill call requests allowing us time to verify information.

Lastly, we talked about bringing new people into the workflow of InterOccupy and recruiting new CoCs in different locations. Because face-to-face communication was as central to this movement as the latest technology, InterOccupy sought to provide channels that amplified the ideas of the Occupy movement, while simultaneously deepening regional networks. Because many within InterOccupy started out traveling and connecting with other protesters face-to-face, we knew that the virtual network was strengthened, both emotionally and effectively, by physical encounters with one another. Modeled on the communication networks in the American Revolution, CoCs were encouraged to spread information about the actions of other occupations, inform local working groups about upcoming calls through InterOccupy, and arrange regional meet-ups. It was decided that for each new CoC, someone from the Outreach team would call the phone number associated with the CoC and explain more about InterOccupy. This also allowed us to learn more about the CoC as well as vet the veracity of their relationship to a specific GA.

In these two days, InterOccupy evolved from a group of distributed individuals cobbling together a series of conversations through conference calls to an organization

intent on providing a platform for horizontal communication. Over month that followed, InterOccupy hosted one hundred and thirty four conference calls including media, IT, direct action, social media administrators, facilitation training, finance discussions, labor support, arts, food justice, and the bus tour. Regional calls were picking up as well in Pennsylvania, the Bay Area, Southern California, Texas, the Northeast, and Colorado. By mid-January, protesters were also requesting issue-based calls to discuss the Article V amendment to the constitution, Women's rights, organizing against foreclosures, and student debt. Additionally, each subgroup for InterOccupy held a weekly call in addition to the Monday night general call and the Thursday night call planning team. Training new volunteers to operate the Maestro interface became a top priority as we did not want to turn down any requests for lack of people power. We left that meeting full of hope that our work could make a difference both locally and nationally. The first experiment would soon be upon us.

InterOccupy: A Beta-test

Excitement abounded across the movement as Occupy Oakland was preparing for an attempted occupation of a building. The Occupy Oakland "Move in Day" on January 28, 2012 gave protesters from around the country a place to focus their attention. Some flew in from NYC to take part in the march to a vacant building that would be converted into a social center. Those from Occupy LA who travelled to Oakland for the day's events reported back, "It was so much fun. I lost a tooth." The

events were video streamed live from multiple online accounts and thousands were in attendance and many more were watching online.

Leading up to the event, OccupyOakland.org and other sites shared the call to action for #J28:⁷⁴

It's cold outside. Like millions of people in this country, Occupy Oakland has no home. And yet, all over the city, thousands of buildings stand empty. On January 28, we're going to occupy one of those buildings and turn it into a social center. We're going to fill the space with a kitchen, first aid station, sleeping quarters, an assembly area, libraries, free school classes, and hundreds of uses yet to be determined. Let's establish our new home, defend it, and adapt it to Oakland's needs. We get what we can take.

The Occupy movement is largely based on direct action outside the law. Like the encampment at Oscar Grant Plaza, the building move-in is not legal. As with the plaza, however, there is safety in numbers, and we believe that the best way to protect each other is to set up a free, open space in which people can come and go. During the two days of the festival, we will hold assemblies to further define and organize the use of the building.

On #J28, thousands flooded Oakland streets in a nomadic march. The final destination was not widely shared as security concerned everyone, but later the target was revealed to be the abandoned Kaiser Convention Center. Wielding homemade shields, buttoned up with chest plates, and helmets, the day began with a rally.

Banners read, "If it is vacant, TAKE IT," "Commune move in," "ACAB scum," "We carry a new world in our hearts." A flatbed truck carrying protesters and supplies snaked through the city blasting music as police lines formed at various intersections attempting to stall marchers from reaching their destination. Protesters chanted,

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⁷⁴ For more information, visit: https://occupyoakland.org/2012/01/move-in-flyers/ Last accessed 5/20/2015

"Move pigs get out the way! Pigs! Get out the way," as they rolled office chairs and couches through the streets.

The march stopped when police launched tear gas, initiating what later became known as "The Battle of Oak Street." Police issued an order to disperse, while car alarms sounded. Police threw flash grenades at the protesters, which seemed to make the crowd even more determined. The amplified orders of the Oakland Police boomed, "Leave the area. If you do not, you may be arrested and subject to removal by force." Protesters lined up with metal barricades and defenses made of garbage cans sawed in half, each marked with a spray painted circled A. Those who brought gas masks used them, while others soaked rags in vinegar and water to quell their scorched lungs. "When Oakland is under attack, what do we do? Stand up! Fight Back!" protesters screamed as they advanced on the police line. Officers responded with rubber bullets and bean bag munitions. Protesters retreated, now using the furniture as make-shift barricades to prevent more injuries.

They kept marching for hours and hours. As evening fell, so too did the number of marchers, which dwindled from thousands to several hundred. Those remaining were corralled by Telegraph and 19th St. Police then set off more flash grenades and ran into the crowd with batons. Flanked by officers on three sides and a chain link fence on the other, protesters razed the fence and broke free from the kettle. Pursued by police on foot, the march split. One group was surrounded by riot cops again. Some fled through the YMCA on 24th and Broadway, but more than 300 were arrested as the exit through the YMCA was blocked by police. A much smaller group

headed to City Hall and burned an American flag on its stairs. By the end of the night over 400 people were arrested and Occupy Oakland had failed to take over the convention center. Despite the mass arrest, only twelve people were charged following this action. Eight misdemeanors and four felonies were meted out to those who had prior arrests related to activism with Occupy Oakland.

Usually protests end when there are mass arrests, but in this case InterOccupy decided to kick off a second round of disruption. All day on #J28 members of InterOccupy were texting and chatting with each other about Occupy Oakland's events and how to launch a coordinated response. From SMS to email to Twitter and Facebook the message was clear, "You're watching Oakland, I'm watching too." InterOccupy talked extensively about how to deal with police oppression on conferences calls, but never adopted a formal plan for emergencies. The basic operating guideline was to seek approval from a group outside of ourselves in order to forestall issues related to steering the movement in any particular direction. Moving too fast could lead to mistakes in judgment. But, InterOccupy also recognized that in some instances following protocols about approving calls and endorsing actions could be detrimental to the reputation and legitimacy of the organization. Now faced with the reality of real-time information flows from Oakland, InterOccupy stepped into the center.

The objective was complex: use the existing networks of protesters, especially the email contact lists, to coordinate numerous solidarity actions across the US within hours of the arrests. Coordination began on the OWS road trip, where travelers from

OWS, Philadelphia, and Boston received messages from protesters in Oakland. They messaged their 'home' occupations and confirmed actions. Then, emails were sent over the CoCs list serve to notify others of the upcoming actions and invite more.

From here, a document was shared where CoCs could chat and edit the collective text. As details for the follow up to Oakland's move-in day solidified, a copy of an email sent by Nate to the COC list was used as blog post on IO, which provided an account of #J28 and a call to action for #J29/#SolidaritySunday:⁷⁵

In response to brutal police repression in Oakland this evening (including tear-gas, "flash" grenades, projectiles, mass arrests, and a pregnant woman hit in the belly by a policeman's baton) direct action working groups from at least Occupy Wall St, Occupy Boston, and Occupy Philly, have stayed up late to craft a massive coordinated response. Here are the initial results:

In Philly, we will converge at LOVE Park, at 7pm EST.

In NYC, we will converge at Washington Square, at 7pm EST.

In Boston, we will converge at Copley Square, at 7pm. EST.

If your Occupy can come to a snap consensus on a place, email the location to solidarity@occupywallst.org so OWS can tell the world just how massively this movement responds to such brutality.

Tweet about it with #solidaritysunday and/or #J29.

Here's a draft messaging statement prepared by Occupiers from these various cities (working collaboratively on etherpad, of course):⁷⁶

Yesterday, Occupy Oakland moved to convert a vacant building into a community center to provide education, medical, and housing services

⁷⁵ Source: http://interoccupy.net/blog/solidarity-sunday-occupiers-everywhere-stand-with-occupy-oakland/ Last accessed 5/20/2015

⁷⁶ In this post, Nate mentioned that Etherpad, an open source online collaborative editing tool, is the preferred tool. While InterOccupy leveraged all tools available online during its infancy, the move to open source was a long and difficult process. Collaborating on Etherpad reflects a development in shared values, not just of InterOccupy, but also of the Occupy movement.

for the 99%. Police responded with tear gas, rubber bullets, beanbag rounds, and mass arrests. The state has compounded its policy of callous indifference with a ruthless display of violent repression. The Occupy movement will respond, as we have always responded: with an overwhelming show of collective resistance.

Today, January 29, we take to the streets. J29. Across the country, we will demonstrate our resolve to overcome repression and continue to build a better world grounded in love and solidarity for one another. We will tell our country, the world, and our cities, another world is possible and we will not stand for violent repression from the state and the police.

All eyes on all Occupies.

Be creative! Be agile! BE ORGANIZED! Solidarity, Nate Occupy Philly Committee of Correspondence

The inclusion of an email address hosted by Storg suggested that this was less than a GA consensus or even a consensus garnered by full working groups, and more likely an affinity action. The notion of a "snap consensus" bares this mark as well. An addendum to the email that went out across Occupy Philadelphia included this note, "Full transparency: The Philly part of the plan was agreed to by the fastest moving email thread I've ever been a part of - over 100 posts in an hour or so - which included both the Direct Action listserv and the Occupy Spaces listserv." The NYCGA-IWG provided a map, developed using Ushahidi, which allowed protesters to input location, scheduling, and other descriptive information into the database that was reflected immediately on the large map. The "action map" was also linked on Storg and InterOccupy. The inclusion of a user-generated map was important because there were no human filters slowing down the flow of information at this critical time.

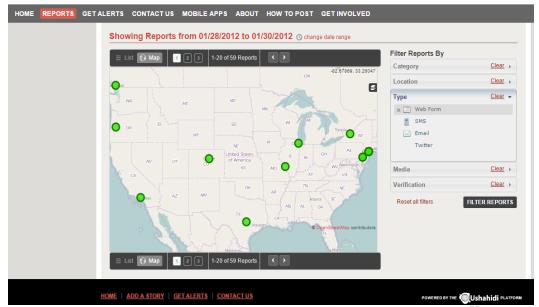


Figure 7.2 Map.Occupy.net of #SolidaritySunday/ #J29 actions⁷⁷

The dots on the map were clickable links that lead to more information. For example, clicking on Los Angeles led to this page:

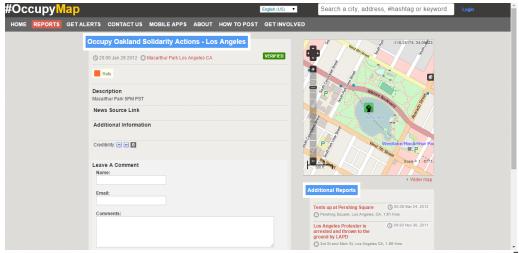


Figure 7.3 Information on Occupy Los Angeles' #SolidaritySunday/ #J29 action⁷⁸

An email was sent to 1200 people who had signed up for InterOccupy's contact list with a link to register for a conference call on the following morning. By morning, the

⁷⁷ Source: map.occupy.net/map Last accessed 5/20/2015

⁷⁸ Source: map.occupy.net/reports/view/753 Last accessed 5/20/2015

information was posted on NYCGA.net, Occupy.net, InterOccupy, and the Storg site on the evening on January 28, 2011. It was posted on all associated social media accounts and had travelled through thousands of inboxes. Critically, none of the communications contained information about the flag burning.

On the morning of 1/29/2012, InterOccupy hosted a call with over sixty participants from numerous Occupy groups seeking information about the action plan. Some callers were concerned that by endorsing Occupy Oakland, the movement was shifting away from its core tenet of nonviolence. The flag burning was national news not only for what it symbolized, but also because it justified the arrests of the much larger group; one mile away from the flag burning over 400 were arrested at the YMCA. On the conference call, the Call Planning Team learned that supporting Occupy Oakland raised the hackles of those who felt that flag burning crossed a crucial threshold towards endorsing violence. A group of twenty stayed on the conference call to craft a collective press release, but only after they finished did anyone realize that none of them knew where to send it. That evening in over twenty-five different cities, protesters held marches, candlelight vigils, speak outs, teach-ins, and flash mobs to show support for Occupy Oakland. Jackrabbit summarized the day's events in an email to the Call Planning Team:

I think what happened today was incredible, and it really proved to me that our work is paying off in a big way for the movement. I have to say - I'm really proud of our work. And I think you should be proud of what you've done to contribute to it all.

But let's not pat ourselves on the back just yet.

There is still a whole lot to get done, this is just the beginning. As the days go on we recognize the weaknesses in our network we need to make stronger. For example, I was thrilled to work with people from around the country to craft a pretty decent press release together in just a few hours, but I have no idea where the channels are to distribute that press release or even if those channels exist. If we continue to work together, look out for each other, and improve on what we've started there is nothing we can't do.

Jackrabbit was right about waiting on the celebration. The Call Planning Team was concerned about the way #J29 would reflect on the movement in the media, but there was no way to put on the brakes. Once the behemoth of the Occupy Movement to lurched forward, there was no pulling back. In fact, there was no talk of how to stop it even if InterOccupy was in full agreement. InterOccupy learned that moving fast in times of emergencies was possible, but at a cost to internal cohesion. By not following our own protocol of waiting twenty-four hours to hold a call and also by endorsing an action which we did not normally do, we effaced our own neutrality in favor of testing the responsiveness of our communication systems.

Tammy reflected on OWS's attempts to do solidarity actions before InterOccupy's infrastructure was in place:

At that point, we were trying with the direct action crew to try to spread the word to do solidarity actions. We going to Facebook pages and trying to do it that way. It was just a mess, and we needed a way to spread the word quickly. That's why the most recent Oakland think was kind of cool, because I remember; I was like God! I remember when we didn't have a way to do it.

On January 29th, there were actions in at least twenty five cities for #SolidaritySunday and several more in the following days. Mimicking the shared power of viral memes, the production of these distributed direct actions spread within

hours from the germ of an idea to an email list to a webpage, through social media accounts, on to the telephone, and finally into the streets. InterOccupy's mission of coordinating action led to harnessing the capacity of protesters to act in concert as a movement, not as a unified body but through autonomously coordinated action.

Critically on January 29, 2011 autonomy meant that if an Occupy location did not want to participate then they did not have to plan a solidarity event. By framing the #SolidaritySunday action as a movement wide event, the call to action unintentionally represented the movement and endorsed the actions of Occupy Oakland.

The tensions on the #J29 morning's conference call reflected the conversation that would blanket Occupy after the #J28 action in Oakland. What was "violence?" And, why did definitions of violence not apply to the police who beat protesters with batons, shot less-lethal munitions including chemical weapons into crowds, and arrested protesters en masse for legal activities? During the sit-in movement of the early 1960s, it was clear that the potential for violence was at the forefront of the minds of black protesters. In order to dampen the reactions of protesters who were certainly going to face physical force during lunch counter sit-ins, James Lawson, a member of the Student Nonviolent Coordinating Committee (SNCC), devised trainings where protesters role played how to deal a variety of aggressions. They played the role of customers, managers, and police to ready themselves for confrontations from customers, who would throw food, or flick lit cigarettes at them, to managers who would try to remove them with force, to police who would beat them mercilessly. Importantly, the sit-in protesters in the 1960s understood that if they

retaliated with physical violence it would justify continued oppression and perhaps even legitimize even harsher responses. Instead, knowing they would be harassed, beaten, and arrested, they used the well-known tactics of the opposition as a strategy to elicit public sympathy through the news media.

A point of comparison is helpful between SNCC and Occupy, not only in the sense that they both struggled with critiquing violence, but also because SNCC went "further than any other civil rights organization of the time by creating its own extensive media structure" as stated by SNCC's communications director, Julian Bond, in an interview with *Life* magazine (Neary 1968: 1140). Within SNCC, debates about non-violence were punctuated by the need for self-defense. While SNCC issued a statement supporting non-violence, in practice many SNCC members in the south carried firearms (Walmsley 2014). Importantly, the internal debates about the meaning of non-violence and its relations to self-defense were not often made public in the news media.

This was due in large part to the Communication Section of SNCC understanding of optics of protest and media coverage. Beginning in 1961, SNCC published its own newsletter titled *The Student Voice*, which outlined the upcoming campaigns, shared meeting minutes, and provided information about local organizations.⁷⁹ It also included many photos of SNCC members, meetings, and actions, which also implicitly emphasized the comingling of blacks and whites. Additionally, the tasks of the Communication Committee were clearly outlined in the

⁷⁹ An archive of the newsletter is available here: http://www.crmvet.org/docs/sv/sv.htm Last accessed 5/20/2015

first newsletter. They were to publish and distribute the newsletter, devise a system for flash news alerts to "alert the nation of emergencies and serious developments," issue press releases, issue "public and interpretative statements," and "develop public relations pamphlets."80

As Murphree (2003) notes, the SNCC Communication Committee was not only handling internal communication, but also worked in the capacity of public relations by monitoring how the media portrayed the movement as well as holding press conferences, special events, and fundraisers. Significantly, the people doing this work were amateurs who did not have a sophisticated stash of skills, equipment, or resources (p. 25). Eventually, SNCC obtained a printing press and put together a photo team to better document their actions (Walmsley 2014: 293). To build the movement, they contacted every sympathetic reporter as well as culled names of students mentioned in newspaper articles in order to inform them about SNCC's upcoming activities (Walmsley 2014; Murphree 2003). Walmsley (2014: 299-300) asserts that by 1964 overt images of civil rights abuses were no longer garnering the attention of reporters who were not actively seeking out stories on the "race beat," so SNCC came to rely heavily on furnishing the news to the reporters. In doing so, they were able to control information about the internal struggles of SNCC itself. By linking the internal communication structure to external communications with the press, SNCC was able to present a coherent identity across these platforms even as tensions mounted over the role of whites in SNCC. Additionally, having a office as a center of coordination,

⁸⁰ The first issue of The Student Voice can be found here: http://www.crmvet.org/docs/sv/sv6006.pdf Last accessed 5/20/2015

where these efforts could be discussed and work delegated, added another measure of internal cohesion as well as institutional legitimacy for those seeking to contact SNCC.

Movements aided by social media are afforded no such mechanisms for selfpresentation. Instead, dramas play out in the streets, which are then amplified online.

The job of a hub is to filter information to its intended audience so that not everyone
knows everything all the time. With social media, however, everyone who is part of a
network finds out eventually, especially if the information involves a crisis or gossip.

While it is extremely difficult to spread information that is purposeful to organize an
action, riding on the attention of an emergency helps networks coordinate in ways that
are not possible when there is no breaking story to carry the message. Undoubtedly,
the police violence and the flag burning on #J28 allowed the networks of Occupy to
shuttle information faster and further across the movement in order to produce action.
Occupy protesters were looking towards Oakland on #J28 to win a victory and instead
they saw a brutal street fight with police.

The successful networking of the #SolidaritySunday action depended on the momentum of #J28, but the fallout from the #J29 experiment though required months of careful discussion and reflection. In this way, the messaging around the #J28 and #J29 actions could have been significantly enhanced and the consequence possibly softened, if the Occupy Movement were able to issue collective statements quickly. The organizational structure, undergirded by social media, gives preference to action as the desired method of discourse. Collective statements, in contrast, work in a

different rhythm, with different rules, and even require different networks of actors who are plugged into the press. While #J29 relied on the federation of networks brought together through the NYCGA-IWG, Storg, and InterOccupy, without press committees in place the actions felt scattered and strained to have any impact.

Particularly in LA, the march in support of Oakland left MacArthur Park headed to Ramparts Police Station, approximately ten blocks away. Along the way, protesters fought over if the march should stay on the sidewalk to take the street. When protesters arrived at Ramparts, they shouted "fuck the police," which then turned to counter chants of "We are the 99%! You are the 99%!" while addressing police. Many left frustrated and even more polarized on the movement's relationship to police. In the days that followed a thread of 40 emails were exchanged across the Occupy LA email list which indicated that taking action without making agreements was detrimental to the group.

Given that conversations about violence, property destruction, and the shadowy figure of the "black bloc" were overtaking all channels of communication across the Occupy Movement, InterOccupy decided to host a conference call to address these debates, offer support for learning non-violent communication, and outline a range of options available to protesters if another emergency surfaced. The initial call was held on February 5, 2012 and opened to over 100 participants from many different areas. Nearly 20% were from OWS and included some journalists and scholars covering the Occupy Movement. Many of the names I recognized from my tour through New York. The call began with a discussion on defining violence and

diversity of tactics. A few comments were very critical of the flag burning and media representations of the movement. The major issue seemed to be that no one really knew what "diversity of tactics" meant in terms of practice. All were encouraged to take this question to their GA and hold a discussion. Callers were asked to return the following week for another call.

The next day, the conversation on non-violence crystallized in a debate between Chris Hedges, noted Journalist and Pulitzer Prize recipient for his reporting on global terrorism, and David Graeber, an anthropologist and an early participant in OWS. Chris Hedges, penned an article titled, "The Cancer in Occupy" defaming anarchists in the Oakland demonstrations. Hedges described the events in Oakland as violent and infused with hypermasculine themes, he wrote:

Marching as a uniformed mass, all dressed in black to become part of an anonymous bloc, faces covered, temporarily overcomes alienation, feelings of inadequacy, powerlessness and loneliness. It imparts to those in the mob a sense of comradeship. It permits an inchoate rage to be unleashed on any target. Pity, compassion and tenderness are banished for the intoxication of power. It is the same sickness that fuels the swarms of police who pepper-spray and beat peaceful demonstrators. It is the sickness of soldiers in war. It turns human beings into beasts.

Hedges continued:

It is a safe bet that among Black Bloc groups in cities such as Oakland are agents provocateurs spurring them on to more mayhem. But with or without police infiltration the Black Bloc is serving the interests of the 1 percent. These anarchists represent no one but themselves. Those in Oakland, although most are white and many are not from the city, arrogantly dismiss Oakland's African-American leaders, who, along with other local community organizers, should be determining the forms of resistance.

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⁸¹ For Hedge's article, visit: http://www.truthdig.com/report/item/the_cancer_of_occupy_20120206 Last accessed 5/20/2015

David Graeber, responded with an open letter to Hedges titled "The Violent Peace Police," where he called out protesters who see it as their duty to stop property destruction even if it means conducting citizen's arrest. 82 Graeber wrote to Hedges:

This statement is not only factually inaccurate, it is quite literally dangerous. This is the sort of misinformation that really can get people killed. In fact, it is far more likely to do so, in my estimation, than anything done by any black-clad teenager throwing rocks.

Graeber went on:

In many recent occupations, self-appointed "Peace Police" have manhandled activists who showed up to marches in black clothing and hoodies, ripped their masks off, shoved and kicked them: always, without the victims themselves having engaged in any act of violence, always, with the victims refusing, on moral grounds, to shove or kick back.

InterOccupy discussed the possibility of inviting Hedges and Graeber to talk on a conference call, but could not reach consensus on the issue. Most of InterOccupy concluded that both sides of this debate seemed extreme. In fact, besides the flag burning incident in Oakland, no one on the Call Planning Team could give examples where property destruction occurred elsewhere. Discussion on conference calls and social media posts among protesters turned to "diversity of tactics," not just on the national level but on the local one as well. The Occupy Los Angeles General Assembly debated the need to revise our statement of non-violence again. Instead, members of the GA insisted on its continued use because, as one stated, "Stopping now would mean that we endorse violence."

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⁸² For Graeber's response, see: http://nplusonemag.com/concerning-the-violent-peace-police Last accessed 5/20/2015

The following week on the InterOccupy conference call attendance dropped off significantly, as debates on the meaning of non-violence were happening across all platforms. The conference call was just one place among many. Additionally, some were upset about the title of the conference call itself, titled "National Strategy," which implied that InterOccupy was building a nationwide working group on non-violence. Critics on social media feared that the consequence of hosting national strategy conversations would lead to centralizing power in the hands of InterOccupy, who facilitated the calls and the agenda of the meetings. As well within InterOccupy, we were reticent to hold such discussions knowing that the police and the media could listen. Because there was no way to verify who was who on the calls or to close the meetings, all struggles were public knowledge. Titling the call "National Strategy" instead of "Non-violence and Diversity of Tactics" (the name of the shareable notes generated by users on the call) was meant to provide some cover; however the new name led to charges that InterOccupy could not be impartial.

Typically, InterOccupy would facilitate calls, but the agenda would be set by the call requester, who sought to coordinate on a given topic. This call series, like the events of #J29, breached established protocols and revealed that InterOccupy could not remain neutral in discussions of such importance. Whereas neutrality across the movement tacitly meant not endorsing political candidates, for InterOccupy it reflected our ability to abide by the process and values we set for ourselves.

Compounding the problem, the facilitator of the Monday night general call and a member of the Call Planning Team, delivered a three minute monologue decrying

Black Bloc tactics and warning of "dangerous outsider anarchists" on 2/13/12. That evening a series of emails from protesters in Oakland circulated to CoCs suggesting that protesters move off the InterOccupy platform entirely. Over the next few days over forty emails, sixty text messages, and hours of phone calls volleyed between the Call Planning Team. How do we handle these charges that threatened to dissolve the networks we were building?

As a result, a "Statement of Facilitation Integrity" was collectively written and adopted by the Call Planning Team:⁸³

THE NEUTRALITY OF INTEROCCUPY ORGANIZATION

InterOccupy, as an organization, is committed to neutrality and objectivity when providing our services. We provide a communication infrastructure that the Movement can use to communicate with itself. We do not take official stances on any issues. We do not mandate or censor any call content. Any content or opinion expressed on an InterOccupy call is the sole responsibility of the individual. InterOccupy does not take official positions on issues.

THE NEUTRALITY OF INTEROCCUPY FACILITATION

InterOccupy Facilitation seeks to provide a safe space where all voices and opinions can be heard equally. InterOccupy acknowledges the benefit and usefulness of a diversity of opinion. We encourage everyone who participates on our calls to communicate in open and honest dialogue. However, when an InterOccupy Facilitator is facilitating a call we expect that person to reserve their opinions on content for the duration of the call. When an InterOccupy Facilitator is requested for a call we voluntarily waive our right of participation in the conversation.

CALL MINUTES AND RECORDINGS

Every InterOccupy call is recorded through the Maestro conference call system that InterOccupy uses to technically facilitate calls. InterOccupy also provides an agenda template for use on the call. In the interest and transparency all, notes are posted for public review unless otherwise specified by the call requester. If the call requester does opt-out of posting we ask that a brief statement be written for posting in place of

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⁸³ Source: http://interoccupy.net/about/statement-of-integrity/ Last accessed 5/20/2015

the notes. This guarantees accountability for closed meetings. InterOccupy will not judge whether content should or should not be posted. The decision to post is solely the responsibility of the call requester.

INTEROCCUPY OPERATIONS MEMBERS & PRIVACY CONCERNS

InterOccupy is open to any member of the Movement who wants to participate in the project. We have open Orientation calls for anyone who wants to learn about the IO project and/or get involved. InterOccupy is open to anyone willing to participate in an InterOccupy subgroup. However, our commitment to open participation is also complimented with a desire to maintain the privacy of our staff. Therefore, we will not post any personal information about any member of InterOccupy in a public arena without prior expressed consent.

INTEROCCUPY OPERATIONS CALL REQUEST GUIDELINES InterOccupy Operations members are allowed to request calls if they are acting as a member of or on behalf of a working group (or global equivalent) in the Movement. InterOccupy Operations members are expected not to request calls for their personal benefit. If there seems to be a conflict of interest in an InterOccupy Operations member requesting a call then the alleged infringement is to be brought to the next Planning Team Call. Standard internal process applies.

Public statements, like this one, are artifacts that indicate internal dissention over protocols. These artifacts are the outcome of a series of critical dialogues and their publication solidifies the articulation work carried out by a group who was disintegrating. While this is a statement on integrity, it also serves as a very detailed set of rules for the Call Planning Team, the participants on the conference calls, and specifies how information should be managed by the call requester and InterOccupy.

Each paragraph addressed a different criticism facing the organization. First, as an organization InterOccupy refrains from endorsing or supporting any actions, issues, or statements. Second, anyone working in the capacity of "staff" for InterOccupy will not engage in decision-making on any publicly open conference call. This rule was waived for the closed conference calls between sub-groups and for the Call Planning Team. Third, records of all calls are maintained through call recordings and notes, but InterOccupy leaves it up to the call requester if that information will be published online.

Fourth, buried in this paragraph was another rule developed specifically for those who sought access to information about InterOccupy. Without doing work as part of a sub-group, there was no access to information about the InterOccupy "staff." This was largely due to the controversy about the name of the "National Strategy" call, some asked online and through email, "Who are InterOccupy?" Around the same time, other protesters were being "doxed," where their personal information was shared online in an effort to deter them from organizing or to reveal their connections to the state or other groups. In Los Angeles, doxing of protesters reached deplorable lows as those who were most effective at leading actions became the target of this kind of abuse. One protester had her name, address, information on her property holdings published the night before an action. While such information was not incriminating or even suggested she was not who she claimed to be, the effect was to sew paranoia about her motivations as well as to show those who were enemies of the Occupy Movement where she lived.

Historically, doxing became a prominent method of critiquing the powerful used by the activist group Anonymous. The aim was to show police and politicians that their personal information was not beyond the grasp of those who knew only a

small detail about their identity. Because the internet is an information clearing house, doxing is the art of building an information mosaic, where discrete pieces of information are gathered together to form a more coherent picture. For example, the practice of "pig roasting" became a popular way to hold particularly violent police accountable for their actions. When an NYPD officer was filmed pepper-spraying kettled protesters during a march on 9/24/2011, the network of online protesters set to work on finding his identity. While the video recording provided his likeness, it was only by cross-referencing with high-definition photographs from other points along the march did they find a clear picture of his badge number. From there, they found his name, address, relative's names, where he went to high school, and information on a lawsuit filed against him. In other doxes against police, protesters have dumped even more personal information including email address and passwords, log in credentials to dating websites, the addresses of where the target's children attend school, and even naked photos. One popular source of information of all this information is credit reports.84

Lastly, the final paragraph in the statement of neutrality stemmed from the criticism that InterOccupy's consolidation of communication channels could be coopted by those who were in a position to use it for their own benefit. Internally this debate began weeks prior to this statement when Nate announced he would be running

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⁸⁴ As credit reporting rose in prominence, many credit reporting agencies provided access to this information to landlords, employers, bankers, or loan companies for a fee. While some doxs are rumored to come directly from employees at these agencies, public records are another method of finding information. Public records maintained for property contain a good deal of personal information. In some states, property records also require the social security numbers of those making the exchanges.

for congress. InterOccupy was struggling with how to, at once, support Nate in his bid for office in Pennsylvania, but also distance ourselves from political discussions pertaining to endorsing candidates. Statements of Autonomy enjoyed an even longer history in the movement, where many encampments decreed that they would not back any political candidates. Tammy was the first to step up and ask how we should handle this. She wrote in an email to the group, "If we have a core member of our team running for Democratic office, I think we put our entire project at risk." Not everyone felt the same way though.

One member responded that he thought InterOccupy should adopt the "Statement of Non-Discrimination" used by the US Department of Agriculture, with some modifications. He proposed: "InterOccupy prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or part of an individual's income is derived from any public assistance program." Instead, InterOccupy wrote the Statement on Facilitation Integrity, which did not expressly prohibit Nate from participating in the InterOccupy project. As Nate became more serious about his campaign, he stepped down from InterOccupy temporarily and returned after his run ended.

While the #J29/#SolidaritySunday action was designed to illustrate the networking capacity of the network of networks across the movement, it did not end when the actions were over. InterOccupy learned that effacing protocols to meet the

pace of crisis also meant a long process of community reconciliation. We learned a lot about ourselves through the process of re-organization after that action. Although we were still very concerned with our own reputation across the movement, it was important to take a measure of responsibility and make space for difficult conversations in the wake of #J28 and #J29.

At this juncture, Occupy groups across Southern California were looking for a way to move forward. Talk abounded on ways to recapture the momentum of those first few weeks in October when the Occupy Movement was spreading everywhere. Regrouping was necessary, but also required getting participants invested in the tedious work of internal organizing. Throughout January, February, March, and April of 2012, the Occupation Communication Committee at Occupy LA (our version of a CoC) aided in bringing together a series of regional meet ups in Southern California. After deliberating on an email list and conference call, the decision was made to hold the first meet-up in Long Beach on MLK day. The day began with Occupy protesters joining the MLK march through the downtown core. The celebration for MLK was in a public park, where people gathered for a day of music and community activities.

The "Occupy So Cal" meeting took place near a tree towards the rear of the park. There were fifty people from ten occupations attending. We discussed how to better facilitate our communication, how to work together towards the proposed May 1st general strike, and how to combat corporatism non-violently. We decided on a second meet-up for Occupy So Cal on February 11 in San Diego, where we joined a protest against the NDAA (National Defense Authorization Act) in the morning and

spent the afternoon in the park coordinating for the May First General Strike. The SEIU paid for Occupy LA to take a bus to the gathering in a show of support. In San Diego there was some dissention among Occupy protesters about using the park without a permit. In the evening as we held a GA to decide on who would host the next meet-up, the police did drive into the park, on the grass, to see what was happening. Occupy Los Angeles volunteered to host the next event in March.

The third meet up was held in Los Angeles in MacArthur Park, where the Occupation Communication Committee arranged for food, water, and teach-ins to be held all day long. We also had an open mic afternoon, where I arranged for Grammy Award Winning musicians, Tom Morello and Ben Harper to play a set as well as record a music video. Since the mainstream media was no longer covering the Occupy Movement in a significant way, we felt that promoting the May First General Strike could be greatly enhanced by celebrity endorsements. While social media networks were useful for pushing information around the movement, it was now becoming more and more difficult to get information out of those networks and into the public.

Coordinating the May First General Strike in Southern California seemed to put to rest several of the feuds that began in the camps. Many in Occupy LA were excited to be aligning with more militant groups like the Brown Berets and the Black Riders Liberation Party, as well as labor unions and the well-networked immigration movement. Planning for the event began in earnest in February, which included a

⁸⁵ The music video can be seen here: https://www.youtube.com/watch?v=lpmRU2TPJ-Y Last accessed 5/20/2015

weekly local meeting in LA. InterOccupy also hosted a series of conference calls to find out what kinds of actions other Occupy groups were planning for May 1.

Confusion set in as the call title, "May First General Strike," did not sit well with historians of labor. The issue was one of capacity. If May 1 was labelled a general strike, but we did not produce a full fledge general strike, then we were setting ourselves up for failure. Over time those issues subsided as energy and excitement increased. The calls were most useful for Occupy groups in smaller cities and towns who shared ideas and tactics on how to participate in May 1 activity without needing to call it a general strike. Unfortunately, no significant collective messaging or coordination resulted from these conference calls.

In January and February 2012, another group was using the InterOccupy system to plan actions across multiple cities. The "Shutdown the Corporations" action planned for February 29, 2012 (#F29) targeted corporations who were members of the American Legislative Exchange Council (ALEC). Organized through Occupy Portland's Action Lab, the invitation to join the event was sent around the movement via email in early January, it read:

Occupy Portland calls for a day of non-violent direct action to reclaim our voices and challenge our society's obsession with profit and greed by shutting down the corporations. We are rejecting a society that does not allow us control of our future. We will reclaim our ability to shape our world in a democratic, cooperative, just and sustainable direction.

We call on the Occupy Movement and everyone seeking freedom and justice to join us in this day of action.

There has been a theft by the 1% of our democratic ability to shape and form the society in which we live and our society is steered toward the

destructive pursuit of consumption, profit and greed at the expense of all else.

We call on people to target corporations that are part of the American Legislative Exchange Council which is a prime example of the way corporations buy off legislators and craft legislation that serves the interests of corporations and not people. They used it to create the antilabor legislation in Wisconsin and the racist bill SB 1070 in Arizona among so many others. They use ALEC to spread these corporate laws around the country.

In doing this we begin to recreate our democracy. In doing this we begin to create a society that is organized to meet human needs and sustain life.

On February 29th, we will reclaim our future from the 1%. We will shut down the corporations and recreate our democracy.

Join us! Leap into action! Reclaim our future! Shut down the corporations!

*This action received unanimous consensus from the Portland General Assembly on Sunday January 1st, 2012.

Along with this flyer,



Figure 7.4 Flyer for the #F29 action⁸⁶

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⁸⁶ Source: http://www.shutdownthecorporations.org/?page_id=26 Last accessed 5/20/2015

The process for joining this action was relatively simple. Occupy protesters were asked to get their GA to agree to participate in this action or to form an affinity group to hold local meetings. All who were interested could join the weekly conference call to discuss messaging and possible locations. Similar to the Occupy the Ports action in December 2011, this was a concerted attempt by a group to organize an action with enough time to discuss details and workout agreements before the action took place. In addition to using social media and already existing networks, the Portland Action Lab operated a website, shutdownthecorporations.org, dedicated specifically to providing up-to-date information as well as digital resources like memes. A list of proposed tactics such as "sit-ins, strikes, blockades, boycotts, banner drops, culture jamming, and performance" and resources on non-violent protests shaped the ways that organizers thought about the action as well. They also kept a running list of contact information; where nearly eighty Occupy groups signed on to host an action in their city. Using all of the other platforms as leverage, this information hub provided the transparency and openness necessary to coordinate across the movement in a way that clearly outlined the goals of the event and visibly represented those who were participating.

The results were much different in terms of creating a satisfying and effective action that presented a unified message, drawing protesters into the streets for a common purpose, and raising awareness of ALEC's nefarious practices. While turnout was low in some cities, the blockades of Walmart received national news coverage.

Reporters began covering stories related to ALEC, its business practices, and

corporate funders. Three weeks later, Andrea saw a video on social media calling for a "Million Hoodies March" to support the family of Trayvon Martin in their quest for justice. Andrea reached out to the man who made the video and offered the services of InterOccupy. We held several conference calls in preparation for the "Million Hoodies March" in Union Square on March 21, 2011. Accessing the pre-existing networks of the Occupy Movement gave the march a boost in attendance as well as tied the Occupy Movement more closely into the critique of ALEC. The murderer of Trayvon Martin, George Zimmerman, was relying on a 2005 "Stand your Ground" law written by ALEC. Following this action and subsequent actions in support of Trayvon Martin all over the US, the media dug deeper into the ALEC story, uncovering connections between conservative and progressive corporations. Thus began the mass exodus of corporations from ALEC's client list including Walmart, Kraft, Intuit, General Motors, General Electric, and Amazon. Tech companies: Facebook, Ebay, Yahoo, and Google, all left ALEC in 2014.⁸⁷

By putting ALEC at the forefront of a day of action, Occupy was able to illustrate that complex issues could garner public interest and the continued attention put on ALEC throughout 2012 demonstrated that the movement could be part of social change. It also illustrated that the Occupy Movement could coordinate action across dozens of locations as long as it utilized an infrastructure. This infrastructure included a website for warehousing information, conference calls for communicating across

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⁸⁷ To see the full list of corportations that have left ALEC, go here: http://www.sourcewatch.org/index.php/Corporations_that_Have_Cut_Ties_to_ALEC

distances, email lists for working on the details, social media for promotion, and collectively working on materials for release to the public and press.

Importantly, while members of InterOccupy were instrumental partners in organizing this action as providers of infrastructure, we were able to sink into the background and provide support when needed. In December, we developed a manageable workflow and delegated tasks to each member. By January, we considerably increased the volume of calls and the number of people in our network. After stumbling through #J29, we realized the organization required attention to protocols and rules of engagement in order to maintain a good reputation among users. Through February, we hosted over 140 calls for many different groups, issues, causes, and regions. The #F29 action proved that with time and attention to detail, the network could be used to target any manner of issues.

From March through June, the CoCs were hard at work planning the National Gathering (#NatGat) scheduled for Philadelphia on July 4th weekend. Using a similar method as #F29, CoCs brought the proposal for the #NatGat to their GAs for approval. Occupy Philadelphia asked CoCs to present this text:⁸⁸

We, the National Gathering Working Group (NGWG), propose a National Gathering of the Occupy Movement on July 4, 2012 in Philadelphia, Pennsylvania at Independence Mall in order to collectively craft a Vision for a Democratic Future. We further propose that our convergence begin on June 30, 2012 for four days of community and Movement building exercises including speakers, teach-ins, and free-flowing open discussion at a location to be determined by the Philadelphia General Assembly.

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⁸⁸ For the full text of the proposal, see: http://www.nycga.net/2012/03/occupy-national-gathering-proposal/ last accessed 5/20/2015

Although controversial and mistakenly confused for the 99D, the CoC network moved forward with planning this gathering. Like #F29, this group sharpened their skills as a virtual organization, using the infrastructure of InterOccupy and the internet to coordinate across email lists, conference calls, their website, and social media.

Participants on the #NatGat call would take on different tasks in order to get ready for the face-to-face meeting. Sub-groups dedicated to coordinating travel, logistics, scheduling, food, IT, arts/culture each had their own email address and contact lists. As #NatGat drew closer, more people joined the calls and were given different tasks. The event was a significant moment for InterOccupy because it brought together over 1,000 participants from 109 locations. Like the event at Pace University, the weekend's event centered on a large "visioning" meeting, where participants self-sorted into different discussions. The goal was to produce a collective list of solutions to all of society's problems. The document listed 683 different items ranging from free education, local food production and economies, respect for all cultures, housing for all, and free healthcare. At the top of the list, 203 people endorsed "clean air, water, and food," while at the bottom of the list only one person supported "universal robotic operating systems." The follow-up from the event occurred through conference calls hosted by the NGWG. Over the next few months, the group dwindled down as interest waned. Significantly though, the #NatGat produced several offshoots that met regularly through InterOccupy conference calls. The most active of these groups were Occupy Women, who organized several actions in the spring.

A pattern was emerging from groups using InterOccupy that resembled a virtual organization. InterOccupy was beginning to become a center of coordination for movement-wide activities that required planning, making agreements, and delegating tasks across a geographically distributed group. On May Day 2012, InterOccupy launched a new version of the website that contained all of the older features such as information about the organization, instructions for requesting a call, a conference call calendar, an archive of the notes and recordings, and a movement-wide action calendar. Additionally, the new website was designed as a multi-site where users could administer their own information hubs. Designing the site in this way took some of the burden off of the Call Planning Team as call requesters could now directly log into the website and update their hub with conference call scheduling, notes/recordings, actions, and any other information. Prior to this website reorganization, InterOccupy manually conducted over 600 hundred conference calls.

To support this new website, InterOccupy received an infusion of cash from Ben Cohen of Ben and Jerry's Ice Cream in order to cover the costs of servers, produce a newsletter, and to aid travel for members of InterOccupy to #NatGat. Ben Cohen met members of InterOccupy at the Occupied Office over the winter. He mentioned that he was organizing an affinity group, "the Movement Resources Group," (MRG) to distribute large sums of money to Occupy groups who were doing "good work" across the movement. InterOccupy had a conference call with him in January 2012, where we agreed to apply for funding when the MRG issued a call for proposals. By February 2012, a significant rift in occurred in OWS over the MRG

funneling money away from the NYCGA/Spokes Council and usurping the process by which the group makes decisions about money. The OWS Organization Working Group including some members of the Finance Working Group issued a collective statement condemning the MRG. A slogan familiar to those in the movement closed their statement, "Don't speak for us, speak with us."

For InterOccupy, the main consequence of taking MRG's money was technological. It meant moving our email lists on to the CiviCRM maintained by OWS Tech Ops (including members of the NYCGA-IWG), so that we could format and distribute a newsletter. While there was internal debate about accepting the money from this source due to the controversy within the movement, aligning with OWS's infrastructure was no longer an issue. Badger handled much of the bridging across Occupy.net and InterOccupy because he was a trusted member of both groups. He described the exchange:

InterOccupy and Occupy.net are managed in that kind of open process that's developed organically over time. All of the other websites that are out there are really just being managed by a few individuals, kind of being able just to do whatever they want with them. And I think that recognizing that was also part of the decision to abandon the Occupy.org work and just create an alliance between those two groups [InterOccupy and Occupy.net], which is basically what we did. We ended up -- Occupy.net developed all of the open source tools and -well, so we spoke about this, that Occupy.net was great at developing those open source tools that were really valid and useful, but nobody was using them because they weren't really getting the word out about them. InterOccupy was really great at getting people actually together and doing stuff, but we weren't all that tech savvy really. So that's part of where the hub concept came from also was like, okay, we've got all these tools. Let's bring them together in this space where we've got the people and you know, manage this all together.

During the course of the redesign, InterOccupy fused web services with Occupy.net in order to streamline the tools Occupy.net were building into the infrastructures of each hub on the InterOccupy website. Now, instead of taking notes on a sharable document maintained by Google, agendas and note taking took place on pads housed at Occupy.net. The mailing lists, which had long been serviced by google groups, were now managed through lists.occupy.net. Joining these groups also meant that the workload distributed across the web team would change. If something was buggy on the website, InterOccupy contacted Occupy.net who fixed it when they had time. Prior to this, the website was less complex and did not require much knowledge of programming. Overtime, Occupy.net was able to train members of InterOccupy how to use the backend of the site as well as CiviCRM. This resulted in fewer people overall knowing how to manage this crucial resource.

Another change to the site included the addition of a way for individuals to submit stories, actions, statements or blogs to the "newswire." The addition of the newswire added several more steps to the process of posting content, as Andrea outlined:

Anytime we get an announcement or a statement or a resource, anything that will go into the newswire, the newsletter, I post it up on the website. And then I put it up on our Twitter, and I make sure it's hashtagged appropriately. And then I send it to Occupy Together. The urgent ones I send to Occupy Together, and to STorg. I send it to them. I send it to OWS. And then I put it on three Facebook pages, mine that has 2,800 people, or no, 2,100 people on it. InterOccupy's page that has a little under 5,200. And then occupy central that has 10,000 and something people. So I do those, all those things every time an announcement comes in, I blast that out. And usually, especially if I'm doing urgent stuff that I ask Occupy Together and STorg to do, you know, they've got gigantic numbers from when the movement first

started. So they tweet it out as well. And things start propagating from there, people re-tweet it, whatever. And then it brings, it refers everyone back to our website because we have like this social plug-in, so we can see how many people have re-tweeted it, how many people have liked it on Facebook. And it drives traffic to our site as well.

While adding the newswire meant that InterOccupy would have fresh content from a variety of sources, ensuring that the content was seen across the Occupy Movement meant bringing other channels into line. Importantly, Andrea's description illustrated that content sharing across the Occupy Movement occurred mainly because administrators knew one another and took the time to coordinate through back channels. By spring of 2012, the networks Andrea described were all women concerned with keeping open the networks built during the fall of 2011.

After #NatGat, participation dwindled significantly on the InterOccupy network as well as across the movement. In July 2012, InterOccupy hosted 66 calls and many of them had low attendance. We did not start keeping data on call attendance until February 2012. In February 2012, the number of used call lines shows that 1,929 lines were used across 125 total calls in contrast to July 2012 where only 794 lines were used across 66 calls. While call volume picked back up in August with 89 conference calls with 808 lines used, the calls were very small. Most of the increase in number of conference call is attributable to internal coordination for the one-year anniversary of OWS. In September 2012, there were 59 conference calls with a total of 527 lines used. In October 2012, the decline of the network continued with

⁸⁹ In some instances one line is used for multiple people who are listening at the same location. As well, there is no telling the degree of overlap between the same participants calling in to multiple calls.

60 calls using only 452 total lines. The data shows that between February 2012 and October 2012, InterOccupy's networking capacity shrunk approximately 76%.

The Call Planning Team was also disintegrating. The weekly meetings of subgroups were on the decline over the summer and attendance of the Thursday night call for coordinating across these sub-groups was low. The Call Planning Team's email list had slowed to a crawl as no significant actions were planned. While not one was ready to quit just yet, InterOccupy was operating on cruise control. As Andrea explained of summer and experience after the OWS anniversary (#S17):

Honestly I felt like things were dissipating, sort of like driving a jalopy. It's like if I could make it to the next gas station, we'll be okay. You know what I mean. So I felt like, I felt like things were -- I mean we noticed on, at least from the InterOccupy perspective like calls were decreasing, requests were decreasing. The news was sort of like, now only happening on Facebook. It was hard to get people engaged in stuff because they were burnt out, wanting to focus on other things.

Badger, added:

I think that the idea of going out and protesting seemed to really be losing steam in a big way. There was no -- there was no organization that kind of followed S17. So you know it was really like just a flash in the pan. It just happened, and then it was over. And so like anything, any activism that was coming out of that was stuff that people were doing like in their small kind of groups. You know it wasn't, there wasn't anything cohesive in any way.

I, too, planned to close the book on InterOccupy at this point. After all, it was a good story about a bunch of people from different worlds coming together and embarking on a journey to change the world. Sociologically, I gleaned that while connective action brings people together, it is not enough to sustain any group that seeks to make social change for the long-term. In fact, those keywords that brought us

together as "#OccupyWallStreet" did little to coordinate across time and space, or even within areas where protesters were in high concentration like OWS. Moreover, organizations rooted in space have a difficult time disembodying the process of making decisions, when space is limited or no longer available. InterOccupy was the first attempt to wrench the movement's structure and process out of the parks and provide places for similar organizational schemas to take hold.

With InterOccupy, we were careful to bring the values of the movement, as we understood them, into the virtual networks. It took a long time to figure out how decisions could be made that allowed for distributed direct action with input garnered from across the movement. The examples of #J29 and #F29 serve as different models of virtual decision-making that resulted in two separate outcomes. As well, the visioning process used at Pace University in December 2011 and again during the #NatGat in July 2012 pointed directly to the problem of the inability to delegate work after a summit-style meeting. When a meeting, like #NatGat, results in nearly 700 directions for the movement, paralysis takes over. The organization of #NatGat also shows that there was a host of problems associated with virtual organizations manifesting in physical space as a center of coordination for movement-wide activities. Instead #NatGat generated more small groups, which became the preferred mode of coordinating both online and off in the summer of 2012.

Another symptom of the movement's crumbling infrastructure was illustrated in the disappearance or non-renewal of occupy-related web domains. The owner of OccupyLosAngeles.org was a San Diego man who wanted \$2,000 to transfer

ownership to Occupy LA. We could not afford it nor was there interest in registering something different to keep the veneer of a coherent organization. Because most domains are purchased and renewed yearly, Occupy-related domains disappeared en masse in September and October 2012.

Ultimately, Badger saw the most potential in the infrastructure to change the way activists organized online:

It's really cool that what we've done has really just been a catalyst for something that will go on even if all of us end up getting replaced by other people. We've created a system at this point. And it's one that attracts people to participate in, it serves a function, is distributed, and we could all disappear and there will be people to fill our places and keep it going at this point.

Badger was suggesting that InterOccupy has become a relatively stable technological platform with a set of routine users. Disappearing did not mean that people were no longer part of the infrastructure, but simply that technology, ideas, and the roles of staff were delegated in a systematic way. When networks go dim, the infrastructure lays dormant, but neither the networks or infrastructure disappear.

Mobile communication technologies, such as laptops with WiFi and smart phones, help virtual communities manifest in the streets. The coming together of the Occupy Movement in 2011 produced an enormous density of ties across the platforms as protesters exchanged information through cell phones and social media. With wireless networking, protesters are not tethered by wires to the walls of their homes, libraries, or workplaces. Smart phones make it so we are almost-always online and reachable nearly every moment of the day. Social media and email allow protesters to build a storehouse of connections that can be engaged when needed. The consequence

of living in a wireless world was that those who are virtually networked to the movement could also participate from a distance, not just in the streets or homes, but also in their workplaces. Because of this density of ties between people and places, those fighting for social justice harnessed the power to talk to one another as actions unfolded locally, nationally, and worldwide in real time.

In a global context, InterOccupy was just one small node in the massive network of protesters seeking to change the world without taking power. In the fall of 2012, InterOccupy continued to provide communication services to those who wanted an interactive space for networking, skill sharing, and coordinating actions. Many of the Call Planning Team began returning to our lives, cobbling together jobs where we could get them, and thinking about what we would do differently the next time a crisis arose. As fate would decree, our rest would be short.

CHAPTER EIGHT

...To Power

The state cannot provide for people facing an ecological disaster. The atrocities of Hurricane Katrina are testament to this fact. Even with non-profit organizations, like the Red Cross, there is far too much bureaucratic red tape to give aid to thousands who need it quickly. State agencies are so concerned with the bottom-line, while also restricted by regulations, that small decisions like where to send clean water and food can take days. Moreover, the state has no thorough back-up plan for distributing other necessities, like temporary electrical power, gas, or wireless communication networks, during such crises. ⁹⁰ It has long been the case that those who were caught in storms relied heavily on the goodness of their neighbors to survive. It is in these moments that civil society will not wait to intervene.

Such was the case as news spread of a "Superstorm Sandy" approaching the Northeast coast of the US in the last few days of October. Descriptions of the storm suggested it was going to be one of the worst the US has faced with extremely high winds, torrential rain, and flooding. Sandy was set to hit New Jersey and New York the hardest. Some residents in coastal areas began preparing a week in advance by boarding windows, building dams with sandbags, and seeking shelter inland. Those

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⁹⁰ The failure of Government to build, maintain, and provide free WiFi across the United States is particularly short-sighted given that state agencies, like the police and fire departments, have come to rely on private companies to provide cellular connectivity. For information on the troubles in Los Angeles with emergency services and connectivity, see:

 $http://www.latimes.com/local/countygovernment/la-me-disaster-radios-20150324-story.html\ Last\ accessed\ 5/20/2015$

who were unable to move or did not want to leave their homes and valuables behind stayed as the storm came ashore on the evening of October 29, 2012. The storm would go on to cause enormous damage to the east coast, killing 159 people and causing \$65 billion in damages (Ambinder et al. 2013).

I begin this concluding chapter with a final story of infrastructural change within the Occupy Movement. Tracing the lines of communication from inside the camps, across the country, and back again illustrated that space, networks, and technology are the terraform of networked social movements, each affecting one another differently depending on the goal of the net work project. Occupy Sandy, a major transition of OWS into a disaster relief organization, is an infrastructural model for providing immediate relief on a local scale. The motto, "mutual aid, not charity" adopted by the Occupy Sandy network was not only an indictment of the Red Cross and other non-profits, but also a recognition of the notion that societies which value mutual aid survive together. The anarchist zoologist, Peter Kropotkin, describes the benefits of mutual aid in his study of bees:

By working in common they multiply their individual forces; by resorting to a temporary division of labor combined with the capacity of each bee to perform every kind of work when required, they attain such a degree of well-being and safety as no isolated animal can ever expect to achieve however strong or well-armed it may be. In their combinations they are often more successful than man, when he neglects to take advantage of a well-planned mutual assistance.

Here, the combined efforts of Occupy protesters to leverage the networks built during the days of the encampments, while also scaling-up the technologies of communications that protesters are already accustomed to using, led to direct aid in the most devastated areas. In the words of *New York Times* reporter Alan Feuer, "Where FEMA Fell Short, Occupy Sandy Was There." ⁹¹

Without those providing mutual aid after Hurricane Sandy, the ecological disaster could have been much worse for families and individuals displaced by the storm and capitalism. It is not simply that homes needed to be cleaned or rebuilt so that the inhabitants could return, but rather developers were swooping in to buy up property at low prices, the paperwork needed to receive state aid was terrifically difficult, and insurance companies were reneging on policies. If the communities could not organize to meet their basic daily needs, they would not be able to fight the long-term battle against capitalist opportunists.

As the storm raged, nearly every news outlet covered the damage as it happened live. Battery Park was completely flooded as were many homes in Staten Island, the Rockaways, Coney Island, and Red Hook. Occupy protesters, now friends, spent the evening of the storm texting with one another, posting updates on Facebook, and using Twitter to follow the news in different neighborhoods. I text messaged that evening with Jackrabbit and we talked about the power outages in Manhattan, Brooklyn, and beyond. He was safe from the flooding in his Marcy Park neighborhood. He reported back to me on the status of other people from InterOccupy. Tammy, Badger, and Andrea's areas were not significantly affected by the storm either.

⁹¹ For the full *New York Times* article, see: http://www.nytimes.com/2012/11/11/nyregion/where-fema-fell-short-occupy-sandy-was-there.html Last accessed 5/20/2015

In the week leading up to the storm, a group of twenty from OWS spent some time at a retreat six hours north of NYC. They discussed the phases of the movement, critiqued lost opportunities, and thought about the future. Laura, an OWS protester and author of *A Dream Foreclosed: Black America and the Fight for a Place to Call Home*, discussed the retreat:

The vibe was a little sad because people didn't feel like they were seeing really a mass movement in New York. But it also was very much like; at least, we're still in contact. At least, we still got this network. When the network's tested, when it's time, we'll come back.

Tammy, from InterOccupy, was also at the retreat, and described the discussions in more detail:

We talked about either not making way for people to train others, like people getting stuck in leadership roles and then having way too much work and not being able to bring other people in or throwing people into leadership roles where they totally weren't prepared for it and where they got burned really easily. I remember that one really specifically because it's something I really took with me into Occupy Sandy.

She continued:

I remember we had one conversation that was entirely "what would a metaphor of Occupy mean?" And people were saying things like it's kind of like a wild fire, it like burns out and there's a moment where there comes a fire again. I remember someone saying it was like herpes. [laughter] I remember conversations about like "what's next?" Does it still exist or does it not? [...] That was a really big debate. It was pretty heated actually about if it's still this thing where some people who were still really engaged thought it really was or is it something that happened in the past that was a moment. When it's a movement moment, we'll come back.

Laura and Tammy both spoke about "movement moments," that critical time right after a crisis where society is looking for a way to collectivize and remedy injustice.

For Laura and Tammy, the moment had passed with OWS. Of course, there would be other times when social change was possible, but no one was sure how long of a wait it would be. Tammy reflects:

We talked about Occupy Wall Street as a movement moment and what we're going to do differently when the next movement moment happens. But like we didn't -- but like, we literally came home, the storm happened, and we started Occupy Sandy the next day. And so the next movement moment was literally the next day after we had this big debrief about movement moments and what we would do. But we never talked about how we would organize after the storm. That didn't happen.

While the retreat was oriented towards reflection on past experiences, no one in the group expressed too much concern about the storm. Laura recounted the end of the retreat:

And so then we're all like, "Oh, I guess we got to get home early because supposedly like the whole city is going to drown." And so we all drive home and I remember we were with another couple and like they were like, "Oh, we don't have any food." And we were like, "Of course, we don't have any food." And then they were like, "We have to go get food." So then we stopped to get food. Then we get home and then I like never take anything seriously. So I was like, all right, it's cool. Let's just like hang out. And Diego's like, "We got to flyer the neighborhood. We got to set up a hotline. We got to like have all of our precautions."

Diego and Laura were an "occu-couple," they met at OWS Kitchen and struck up a friendship first. Occu-couples were a latent effect of the movement. Romance bloomed in close quarters of the park and the intensity of the actions. There were also occu-break-ups over partner's dogged commitment to the movement and lack of attention to their relationships. There are also occu-babies, but that's another story.

In Laura and Diego's situation, the OWS kitchen was a place to do good work for the movement. The "Kitchen Crew" as they called it, was very close. Because they had to coordinate meals for thousands daily, the Kitchen Crew was densely networked between one another on Facebook, Twitter, through phone, email, and text. The OWS Kitchen was not like other working groups though. Feeding the masses was a serious and daily challenge. Late at night, the Kitchen became a place to hang out, chat, and decompress.

The kitchen was the heart. The kitchen was the soul. And it was like people at the kitchen were very connected. You met everybody. You treated everybody with respect, right. And I think that was the one crew that people could feel value coming from anywhere. You didn't have to read a Marx book or Kropotkin or whatever the fuck his name is, or anybody, right. You didn't have to read like -- you didn't have to know any analysis even. You just had to be -- most of the people that worked in the kitchen were working class people that were rejected.

Laura found the dynamics of the OWS Kitchen particularity insightful for understanding the underlying message of the movement, she explained:

For me, it [The Kitchen] was a really powerful vision of how we actually could value work and people's contribution to society in a more reasonable and rational way. You know, right now if you work in kitchens, you don't make enough money to live above the federal poverty line. You don't make enough money to pay your rent. You don't make enough money to have decent healthcare or try to find -- or the time to try to send your kids to good schools. And but the flipside was in the park, you had everything you wanted if you worked in the kitchen. I mean, man, you had people coming up to you all day just saying thank you. We got letters, handwritten letters addressed to us just saying, "Thanks for serving food."

To them, the OWS Kitchen symbolized the best the movement had to offer in terms of a race and class analysis as those who shouldered the most weight of the menial work were also those (themselves included) who did that kind of work for a living. She went on to explain further,

One of my friend is this guy named Kenny and he was the guy that did every day, all he wanted to do, was he sorted out the recycling from the garbage. So we'd have all these boxes, we'd have all these cans. We had all these bottles. And he would fix it all and make it really wellorganized and bring it over to sanitation in a way where they didn't get messy doing their job. You know what I mean, out of respect to them. And every day I was like, "Kenny, do you want to do something else? Do you want to serve?" He always wanted to do that. So one day he was like, "Listen, I want to show you my neighborhood." So he invited me to go to his neighborhood. And as we were there, somebody was calling out the window, "Hey, Kenny, you forgot to do the recycling this week." And I was like -- and he's like, "Hold on one second, I got to go do the --." and I was like, "Well, let me help you." He's like, "No, no, no. It's not like the park. This isn't valued." You know what I mean. So he did all the recycling for his whole building, but nobody ever respected him for it. And meanwhile, he wasn't doing that because he was coming to do the exact same job in the park where he was getting a lot of respect for doing so. So to me, that was really -- that was the most powerful thing I saw really all throughout Occupy Wall Street. It was just a reversal of how respect works.

Throughout this dissertation, I have tried to show how people use the trades they know best to help the Occupy Movement to complete projects. The example of those that came to work in the OWS Kitchen and selected tasks based on the kinds of work they were already doing illustrates that this phenomenon was an unspoken principle of how the movement accomplished the goals set out before them. Working in small groups in the encampments tightly networked small groups who became agile teams that could replicate that work elsewhere.

Speaking almost in synchronicity, Diego and Laura explained to me how they prepared for Superstorm Sandy:

Diego: Fill our bathtub up.

Laura: Fill up our -- and I'm like, 'Let's just hang out.' Like are you serious? So we do all those things. We set up a hotline. Then we invite some -- like anybody who needs to come over. So we had a full house that night. We had probably what, ten people.

Diego: Nine or ten, yeah.

Laura: Nine or ten people including like our -- the guy, the homeless guy on the corner.

Joan: What kind of a hotline is it? Is it just for your friends to call to keep in touch?

Diego: No, it was a hotline for the community to like if the people needed something, like let's say if someone's like, 'Oh, shit, I don't got any water' or something like -- or like 'I'm trapped' or I don't know, 'I need a -- there's an emergency' or something.

Joan: So they can call you?

Diego: Yeah, I mean, so at least we knew and we could like -- so it was supposed to be a way that we can communicate.

Laura: Yeah, because we're not explaining it well. So, we're also part of Occupy Sunset Park.

Diego: And we also helped out with the rent strike.

Laura: And we helped out with the rent strike.

Diego: I mean, we both were I think pretty key to and she wrote really beautifully about. And like we both were very involved in that. So that connection, we'll live here and our friends here and whatever. So it's not just like our activist friends, it's like the community. So, we definitely wanted to be prepared.

Laura: Right, so we essentially -- I mean, just to be technical, we made a Google Voice number. And we printed it out as like a hotline, advertising it as a hotline in English and Spanish and put flyers all over the neighborhood. With the idea that obviously the two of us would not be able to field all those calls if there was a real problem, but that we could at least start. We could loop in Occupy Sunset Park and we could use like online network organizing to get

the word out if we had Internet. So then the storm hit. So we have a fun night. I mean, nothing bad happens in Sunset at all."

Diego: There was like a fire down by the dock, but –

Laura: But nothing. We didn't lose power, but we woke up the next

morning...

Diego: We watched -

Laura: The Battle of Algiers.

Diego: We watched The Battle of Algiers all night. That was good, and we

ate. So, you know, we were definitely comfortable because Sunset

Park is like the highest point in Brooklyn."

The flyer they posted around the neighborhood read:

BILINGUAL SUNSET PARK STORM HOTLINE:

If you need food, water, information or assistance OR if have resources to share, please call the bilingual sunset park hotline: 347-762-1407. Communities care for each other.

NUMERO PARA ASISTENCIA DURANTE LA TORMENTA

Si necesitas comida, agua, información o ayuda o si tiene recursos para compartir, por favor llame el número 347-762-1407. La comunidad se cuida.

While they did not receive any calls to the hotline, Laura and Diego provided a space for evacuated people to gather, commune, and discuss revolutionary power. This evening planted the germ of an idea. Because there was no public transportation immediately after the storm, they took their car to pick up some friends they met during the days of the camps and began driving through the devastation. They called another OWS friend who lived in Red Hook, she told them, "Yeah, I got out, but shit is crazy. There's ten feet of water still on the streets."

By that afternoon, the car full of OWS protesters arrived at the Red Hook Initiative, a community service organization established in 2002. 92 They chose to go there because another person in the car, Premo, had connections to this group.

Surveying the area, Diego, Laura and their counterparts decided to open a "guerrilla kitchen," as Diego described it. Critically, it was not just Diego and Laura who had kitchen experience. Premo also volunteered with Common Ground Collective after Hurricane Katrina. Common Ground Collective was a coalition of community organizers in Louisiana that stepped in to help those most affected by Hurricane Katrina in 2005. They set up temporary shelters, kitchens, as well as provided medical and tech support in the neighborhoods that were least serviced by FEMA and the Red Cross. Common Ground's motto, "Solidarity, not Charity" is a reflection of their anarchist orientation.

Diego and Laura describe how the coordination of the kitchen began:

Laura: We approached them [Red Hook Initiative] and we were like, "Listen, here's the deal. Like you know, can we help build a kitchen here?" And they were like, "We don't have any food. We don't have any people to do that." We were like, "Listen, you have a SPACE [emphasized speech] and that is the most important thing in this situation. You guys want to run a kitchen, like all we can commit to is we will bring you volunteers and we'll bring you food." They were really awesome. Like, they really stepped up. They were like, "We will do that if you come through and bring us volunteers and bring us food." So we called up Occupy Sunset Park which had been somewhat at least a little bit organized.

Joan: How many people are we talking about?

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⁹² For the Red Hook Initiative's report on Hurricane Sandy, go here: http://rhicenter.org/wp-content/uploads/2013/10/RHI-Hurricane-Report-6_2013.pdf Last accessed 5/20/2015

Laura: 12 to 15 active members. Small. And we're like, "We need some food." And we call up our friend who's the Minister of Jacobi, which is a church. And we're like, "We need a space."

Diego: The church is only ten blocks down.

Laura: Yeah. And we're like, "We need some space. We need space for people to drop off food." And he's like "- okayyyyy." So, we also had lived with him for maybe like eight months and he would like let us --

Joan: Is he part of Occupy Faith?

Laura: Yeah, he's part of Occupy Faith.

Diego: Juan Carlos, yeah.

Laura: And so he had like -- he had one night offered to let us stay. And like eight months later, he was guys, "You guys need get the hell out of the house." So I'm like, I'm on the phone with him. I'm like, "We just need a place to drop off some food for like a night." And he's like --

Joan: And he knew...

Laura: He knows. So he's like, "I know this is not going to be a night, but just do your thing. There's a major crisis." So people start dropping off food, but like just a few, you know what I mean. And meanwhile, folks from Free University, CUNY and other folks are mobilizing volunteers. So we all meet up at Red Hook with some food, with some volunteers, with Tammy. And she starts to set up the InterOcc site. 93 People had just gotten back from Rockaways.

The connection made with the Red Hook Initiative (RHI) proved to be a crucial center of coordination on the afternoon of 10/30/12. The dimmed networks of OWS began to flicker. Occupy Faith was the group who were most persuasive in choosing a target for the #D17 reoccupation. Because Laura and Diego moved to NYC to be part of the encampment, The Minister of Jacobi gave them shelter after the raid

⁹³ By this time, some people shortened "InterOccupy" to "InterOcc"

on Zuccotti. Arranging the use of Jacobi Church, as well, proved to be a pivotal alliance in the days after the storm. OWS had the networks, but space was still an issue. Especially because it was very cold outside, the inclination to attempt to build kitchens in parks would not serve all the needs of the public including warmth and electricity.

While this group was making moves to get food to Red Hook, another small group was gathering. Tammy described how she and others ended up in Red Hook:

Andy, who I had driven to this retreat the weekend before, had left his jacket in my car. So he called and he was like, "I'm coming over. I need to get my jacket from the car. I'm supposed to go help Diego in Red Hook." So, he came over and to get his jacket. And Sam had these really huge battery packs that were like these really big -- and we had charged them the night before the storm just in case something happened, we'd have these batteries. So we had these huge batteries. And when Andy got there and he saw them, and I had a car because my mom had given me this car, we're like, "Oh, we should bring these batteries with us." So Andy convinced me very begrudgingly. I was in my pajamas about to watch some shows on the computer. And he convinced me to drive him to Red Hook and I was like, "Fine." So I drove Andy to Red Hook and that's kind of where Occupy Sandy started, Red Hook. We got there and Premo was there and Diego was there. I was there with Andy and a few other people had started showing up. I didn't really know most of them. Some of them -- you know.

Tammy explained how the infrastructure thickened rapidly. She outlined the critical questions that needed to be solved as soon as possible,

And we were talking about like what can we do? The idea that they wanted was -- because Andy and Premo had both been in New Orleans. So they wanted to set up these community kitchens in different areas. I think that was their original idea. So we got to this Red Hook initiative where someone had a relationship with, I really don't know who. And we were going to start setting up these kitchens. They had power for some reason. And all these volunteers started showing up. So, we corralled all the volunteers. Okay, we need a plan because people

started showing up and didn't know what to do. We were in this random building. And there was no transportation at the time. There was very little power. So we were like, well, we should be collecting supplies.

Question one was essential to framing the project around the needs of the community. What can we do? With more volunteers on the way, coordination was critical to keep the momentum going and to serve the needs of the people. Most of these volunteers were coming from areas not impacted by the storm. They had the time and energy to help but they could not be left to idle too long. Tasking them with collecting supplies was a start, but where would these supplies come from?

How do we collect supplies when no one has transportation? Red Hook isn't easy to get to even when there is transportation. So we decided that we'd make these drop-off points around the city and we would drop off stuff. You know, we'd tweet where people can drop off stuff. And so people volunteered their houses for a drop-off location.

Question two involved logistics. Without public transit, what are alternative methods for bringing together people and supplies? By this time, decentralization was an old habit of OWS protesters. Learning to come together, break apart, and regroup was the hallmark of many direct actions over the last year. The aftermath of the raid illustrated that many spaces could be leveraged for different purposes. Finding places where supplies could be left safely to be delivered en masse at a later time would allow for supplies to start flowing out of many locations and into a few hubs to be sorted and rerouted later. This process for disseminating supplies looked strangely similar to the way information was shared across the movement: from an individual, to a hub (working group), to the larger group (GA).

Tammy then described how the InterOccupy platform could be used to manage information between the sites. She recounted:

And then we were like, okay, but how are we going to get this information out? And so someone was like, well, we need a place where we can just put all the information and then blast it out. I was like, we can use the hub, an InterOcc hub. That's the whole point. So I called Badger who was in California was in stuck in LA or San Francisco or somewhere. I was like, "Hey, can you make a hub for us?"

With the distribution of supplies worked out, a plan for receiving, processing, and disseminating information was also necessary. InterOccupy.net was a platform that already existed that many congregating at RHI had experience using in the past. The platform had been tested with #J29, redesigned to align technology with the changing needs of protesters, and practiced by users for a variety of smaller initiatives. Badger was able to work on creating a hub from a distance. He later enrolled a much larger group from across InterOccupy and Occupy.net to help in this process. Tammy also recalled how the social media came together independently of those in Red Hook, she stated:

Meanwhile, a Facebook page had been set up the night before. A WePay [donation] page had been set up. Justin had all these "Recover" sites that he had set up. Like all these pieces had kind of happened independent of each other, but none of them were connected and there was obviously the fear of redundancy. So we created the hub where we put the Facebook page and the other Recovers websites. We put the WePay page and we put all these drop-off locations that people could drop off stuff. And then we blasted that out through social media.

The "fear of redundancy" that Tammy highlighted was another critical lesson from the camps. Redundancy of networks online comes at a low cost and can be beneficial when sharing information across multiple platforms. Redundancy can also

be useful when looking to create a failsafe mechanism, such as backing up data in multiple places. Redundancy of infrastructures, however, is harmful in situations where there is a high volume of work and few workers to complete the tasks. In this situation, redundancy can cause confusion or create unnecessary competition between groups who are looking to accomplish the same goal. In this last instance, redundancy stems from lack of coordination and leads to wasted resources. Without a way to organize these groups alongside the components of infrastructure they were managing, the same multiplicity of infrastructural practices used in the days of the camps would take hold. For every occupation, a new infrastructure emerged, which usually included a website, email list, streaming video, Facebook page, a Twitter account and public meetings. At this juncture, a similar structure could have developed, if not for the network-making capacity of OWS protesters and the services already in place through InterOccupy.

Some components of infrastructure were already established, others came together within twenty-four hours. A former member of the OWS Finance Working group created the WePay and the "Occupy Sandy" Facebook page on October 30, 2012. Her intention was to raise a few hundred dollars to buy supplies to be given to people in distress. Justin was present at OWS since the encampment and helped to bring together the social media, specifically the Twitter account, "OccupyWallStNYC. This account was operated as part of the NYCGA's "TweetBoat" Working Group. The account had over 150K followers by the time Sandy thrashed the east coast. Justin was working on an initiative to get more people

to use Recovers.org, a platform designed specifically for ecological crises. While people were meeting at RHI, he was already coordinating supplies and aid through social media using the keyword #SandyVolunteer. In order to bring these pieces together (Facebook, WePay, Recovers site, InterOccupy, and the volunteers at RHI) Justin created a small email list called "Sandy Recovery Crew" through Google groups. He set up a conference call between these emerging projects in an effort to reduce the workload and build political power.

Importantly, Justin did not attend the retreat earlier that week, nor did he have a background like others in disaster relief. Prior to the storm, though, he met with Chilean students who were instrumental in winning popular support and concessions from the government after they provided support to communities damaged by an earthquake. He explained the process that Chilean students used to turned certain defeat into a political opportunity:

The movement was almost dead, you know, after the first round of direct actions subsided. And then all of a sudden, this earthquake hit Santiago and the students were the first to respond to the disaster and they were in the streets helping people clear out their homes, clear the rubble, help people who needed emergency medical support. And they didn't do it, you know, under any one particular banner, but the media and others started to recognize that many of them were the same leaders that had propelled the student movement and began to really reward the youth movement, the student movement, for having really stepped up and been brave and selfless and first to respond. And that really stuck with me, the notion that a social movement is more than just protests, it's more than just political direct action, but actually creating viable alternatives to the oppressive and unjust systems that we see in the world. And then implementing them on any kind of scale, whether it just be a small scale or on a citywide or national level, state level, and showing that they work.

For Justin and many others, a storm like Sandy, could be the next movement moment.

Prior to the storm, he began emailing and using Twitter to contact other groups who could help in disaster response. Recovers.org was a relatively new platform that matched people with needs with others who could fulfill those needs. Recovers listed places where volunteers could go to help as well as provided a searchable inventory of donated items. Recovers design resembled the hub system of InterOccupy. Whereas on InterOccupy each group or cause had its own site, on Recovers each area, like Red Hook or Staten Island, had its own dedicated page.

Recovers allowed for the matching of people and things using a database approach. For example, if you had a chainsaw and were willing to cut up fallen trees, then you would be listed as a service. Then, I could request you to come to my property without us having to meet beforehand. Building a database of needs and supplies cut down significantly on the coordination of aid as few resources would remain idle while waiting for those in need to find those who can help. However, Recovers' sites still required human labor to sort requests and populate the databases with information. To create the database, Recovers relied heavily on social media to produce flows of information into and out of their website. Without aligning with the OWS TweetBoat, few would have known that Recovers.org was available as Recovers' social media pages had very few subscribers. Additionally, it was difficult for InterOccupy volunteers to access the Recovers platform. As a result, much of the work of listing and arranging the delivery of supplies was duplicated within the InterOccupy hub for Occupy Sandy.

Justin brought all of these groups together on a conference call on Halloween morning, where the infrastructure began to coalesce. While there was resistance to calling the effort "Occupy Sandy," the social media and WePay were already garnering attention. Tammy commented on the label, "It had already been named before it even existed." Even if those working on the internal coordination of the project wanted to call it "Sandy Recovery," which was the name of the email group, others had already started mashing the keywords #SandyVolunteer with #OccupySandy on Twitter. Two text loops were created, one for internal organizers and a moderated one to send messages out to the public. Premo, Laura, Diego and others decided to go to the Rockaways to set up another kitchen that day.

Like a rhizome, Occupy Sandy was forged underground from nodes that were growing rather independently of one another. Bringing the different efforts together into a hub on InterOccupy provided a space where these decentralized nodes could intersect. This is not to say that coordination was easy after this point, but rather that rapid growth was now possible.



Figure 8.1 Screenshot of the first Occupy Sandy Facebook Post

Badger and Andrea began working on gathering the information for the hub, InterOccupy.net/OccupySandy. Andrea has some experience using InterOccupy to coordinate for disaster relief in the wake of Hurricane Isaac, which ravaged the coast of Louisiana on August 28-29, 2012. For Occupy Isaac, she set up conference calls, an email group, an email address, and a hub for submitting notes and press releases. The format was much the same for Occupy Sandy. They began by linking to the donation page, Facebook, and Twitter accounts. These were managed by one group that used text loops and group messages on Facebook to delegate tasks. This group also arranged a fiscal sponsor for the monetary donations, which were now in the thousands. Links to the Recovers sites were also listed. There was a list of pick up and drop off points for caravans of people and supplies to outlying areas for canvassing and distribution of food and water. Numerous drop-off/volunteer locations were being added by the day as more churches and community centers opened their doors. Additionally, some, like Andrea, were using their homes as storage facilities in the meantime. Urgent supplies, such as warm jackets, blankets, flashlights, and batteries, were updated daily on InterOccupy. As well, InterOccupy started to collect information about needs as each new drop off and volunteer site emerged in the days following the storm. Much of this information, once it appeared on the website, was tweeted or listed on Facebook so that anyone could supply the resources. As well, those administrating the Facebook and Twitter accounts would share information with InterOccupy so that these new needs or sites could be listed.

A significant revision to the digital infrastructure for Occupy Sandy included adding a "volunteer form" to the site. Using CiviCRM, InterOccupy developed a database to log volunteers. While InterOccupy was adamant about separating our infrastructure from the platforms maintained by OWS, the issue no longer was up for discussion, as we needed every tool available. Using open-source CiviCRM software, the network began gathering information about potential volunteers including their resources and skills, whether they could provide housing, previous work experience, language proficiencies, modes of transportation or other items to offer, or if they were involved in other networks or organizations that could provide help. Shifting to CiviCRM allowed InterOccupy to send newsletters to a quickly growing email list as well as target volunteers specifically to fulfill niche problems. For example, providing support to residents of Coney Island meant sending volunteers who spoke Russian. As well, some areas were impenetrable by car and required volunteers to ride bikes to reach stranded people.

As well, the adoption of Google fusion tables allowed for all of the new location information to be mapped with metadata. Because this application was a shareable file on Google, multiple people could input or sort information at one time. ⁹⁴ The fusion table of public drop off sites included forty-three locations by November 3, 2012. While OWS initially resisted using the tools provided by Google, in favor of free and open software, getting everyone else participating in #OccupySandy to adopt free platforms was difficult because most were accustomed to using the Google's tools

⁹⁴ A historical and technical account of how the fusion table came together is available here: http://www.ericaheinz.com/notes/the-redesign-process-for-occupy-sandy/#.VT0t-iFViko Last accessed 5/20/2015

for school, employment, and personal work. Much of the resistance to free and open software was not ideological, but rather a consequence of habituated practice using Google's tools by those without much technological knowledge. The knowledge deficit was most clear between those who were programmers and designers in their "everyday life" and those who were lay users of ICTs, but were managing most of the data entry and circulation for #OccupySandy.

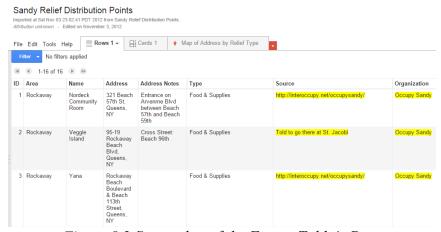


Figure 8.2 Screenshot of the Fusion Table's Data



Figure 8.3 Screenshot of the Occupy Sandy Locations

⁹⁵ Source: Interoccupt.net/occupysandy/occupy-sandy-map/ Last accessed 1/20/2013

After many chatroom discussions, several meetings, and a few revisions, the map displayed on InterOccupy's hub was posted on November 4, 2012. In addition to the adoption of fusion tables, Google Voice numbers were set up as hotlines at each location. Each location had a specific email address to route information. These addresses were also part of Google Groups that shared information across the locations. As well, shareable spreadsheets were used to log information on volunteers contact information and supplies at each location. What this map also illustrated was the capacity for OWS protesters to occupy different kinds of spaces. Rather than occupying public squares, the movement transformed churches, storefronts, and apartment lobbies into distribution and information centers.

Unfortunately, information bottlenecks emerged as these few points of contact (social media and an email accounts operated by InterOccupy) became overloaded with inquires. Even though twenty-nine people were helping with the Facebook, individual requests were piling up. People needed assistance finding lost family members and pets, information on food, money and supplies. On Twitter, the key word #OccupySandy was moving very quickly and required near constant attention 24 hours a day. When someone from the @OccupySandy Twitter account started using the tag #WeGotThis, a flurry of emails were sent asking the admins to stop. While things online looked as if the Occupy Sandy effort was running smoothly, shuttling people and supplies all over New York, the reality on the ground was bleak. Forty thousand New Yorkers were homeless and the people power of Occupy Sandy was

running low. More human labor needed to be integrated into the digital operations as well as on the ground.

The email address, OccupySandy@InterOccupy.net, was accumulating hundreds of emails a day. Andrea was answering as many as possible and rallied myself with three other volunteers to help. At first, the email address was forwarding to each of our inboxes, but this meant we were all answering the same emails. As well, every time a volunteer form was submitted on the InterOccupy, it also appeared in our inboxes at a rate for hundreds a day. This way of delegating work basically froze the personal inboxes of all administrators of this account. We switched strategies to house all the emails in a dedicated Gmail inbox that we took shifts monitoring. As well, we used the google chat function embedded within the inbox interface to coordinate when two people were working on answering the email at the same time. For example, I would start at the top of the inbox queue and begin answering, while another person started at the bottom and worked their way up. On some rare occasions, we would meet in the middle. Eventually, we started to issue "canned responses" as queries started to become routine, such as where to volunteer and where to drop off good were sent links to the website and if it was a good idea to travel to NYC to help to which the answer was always "no."

There were some issues that came through the inbox that required immediate attention. Those who reported being isolated - without food, water, and medicine - were of utmost concern. On November 5, I fielded an email from a woman from San

Francisco who was unable to locate her uncle, an elderly, deaf, and disabled man located in an independent living facility. Her email read:

Dear Occupy,

You were recommend by a friend on Facebook and I am trying to locate my homebound and disabled 80 year old uncle, [Name Redacted] in Howard Beach but dialing an out of state line for 311 has not helped (I am calling from San Francisco).

Best would be to get him moved to a shelter but he is wheelchair bound and can't get down to the street by himself, is also deaf and very stubborn! No phones so I can't even call him.

I understand from Facebook posts that some volunteers are checking on the house bound. His last words to me last Monday night were "help me" and - though I know he made it to the 2nd floor – like everyone on his block he has no power, electric, phone, cell, food or warmth except that he lives alone.

Any help would be greatly appreciated, [Name redacted]

I called her to get his address and some more information. She said she could not get through to the NYPD and NYFD for days and when she did, they responded that they could not go out in search of him. At 4:30pm, I forwarded the email with his address to the "SandyRecoverCrew" Google group and sent an internal coordination text loop asking people to read it ASAP. Within minutes, I received a reply from someone in Queens that read "I can do this." At 5:07pm, I received a follow up email that read "Resident LOCATED and is well! He is being moved now." A year later when conducting follow up interviews with Occupy Sandy volunteers, I was told that when this email was received at the Astoria relief hub, a group of people went out on bikes to the address. Not only did they find this man, but thirteen other elderly people

without food, water, or medicine. Everyone I spoke to about Occupy Sandy had a story like this one to tell, where the most vulnerable, those who were left to die, were found alive because of this network.

As the week wore on, systems for pushing information around the network became more agile across many groups. Like the camps, each location started to operate its own Twitter, Facebook, public email account, internal list serve, text loops, spreadsheets of volunteers and needs, hotlines, in order to move information quickly. The main difference between the infrastructure of Occupy Sandy and those that developed in the camps is that coordination began before the network decentralized. In this sense, as each location developed its own communication system, it was able to plug into the larger network. This way not everyone needed to know everything, but the center of coordination (the InterOccupy hub, and the SandyRecoveryCrew email list) provided enough structure so that information was readily available. As well, nightly conference calls between the "point-person" at each location allowed for troubleshooting complex logistical problems and relaying critical information that was too complicated to explain over email.

The infrastructure was burdensome for those working in badly damaged areas, who had limited access to WiFi or cell service. In fact, many cell towers were down and Verizon was the only carrier available in these areas. Because the city had no humanitarian policy on emergency cell service, those without Verizon were unable to send or receive messages. A cache of Verizon phones as well as short-wave radios were purchased in order to meet the communication needs of those going into remote

areas, especially those using vans to make deliveries. On the ground coordination was held together in two main locations, known as Jacobi and 520 Clinton. These churches were the critical hubs that allowed for goods to be sent directly to their addresses. Volunteers would show up to either of these hubs and sign in for a day's work. After signing in, they were trained for whatever task they were about to do. Volunteers were transported by van and car to locations most impacted by the storm; where they set up kitchens, and generators for charging phones and computers. As well, teams would go door to door with a survey of needs as well as delivering food and supplies.

These hubs were equipped with WiFi or hotspots, which allowed the VOIP hotlines to function in places where cell phones may not. Computer bays were set up to act as a tether linking the digital infrastructure to the action on the ground.

Coordinating between these sites was difficult as many redundant documents started to circulate online in various formats. It took some time and human labor before information was consolidated into documents shared by many. Particularly, the documents related to the inventory of supplies was cumbersome as the color coding scheme to demarcate what we had versus what we needed seemed to change hourly. Eventually, the document was locked until it could be discussed on the evening's conference call.

For these criticisms, creating the infrastructure in this way brought to bear the capacities of those located outside the impacted area to take on some of the information labor. The layering of infrastructure and distribution of human resources allowed for taking on a net work project like Occupy Sandy. Those who were not

affected by the storm, but were still close in the surrounding boroughs of NYC, could offer manual labor in the neighborhoods. The job of the relief hub was to identify the needs of residents and delegate tasks to volunteers who could fulfill them. Information gathered by volunteers in the streets was brought back to these hubs, where it was then funneled to InterOccupy through texts, phone calls, email lists, and social media. InterOccupy then sorted the information for online distribution back through these channels in an organized manner. Much of this sorting, shuffling, and cleaning happened in Los Angeles, Buffalo, Terra Haute, Fort Collins, San Francisco, and beyond.

During the Occupy Sandy campaign, more components were layered on top of this digital infrastructure to solve emerging problems. Like in the #J29 action, when Occupy protesters were activated there was no way to pull the brakes. Within days of asking for supplies and volunteers, relief hubs were swarmed by thousands of people and untold piles of goods. Large vans pulled up multiple times a day with deliveries, much of it clothing. Many blamed the abundance of clothing donations on the Red Cross who could not accept such items. Therefore, anyone who wanted to donate clothing was referred to Occupy Sandy who, as one volunteer said, "would take damn near anything, if it wasn't broke, ripped, or rotten." Stopping the clothing donations required more than just posting on social media or blasting email lists. The newsletter on volunteer opportunities, the status of relief in certain neighborhoods, and updated needs was circulating to nearly 35,000 people, but it was doing little to bring in

targeted supplies. A group repurposed the Amazon wedding registry to ask for specific items as well as limit the amount of each.



Figure 8.4 Screenshot of Occupy Sandy's Wedding Registry 96

What I have described here is the rapid deployment of a disaster relief infrastructure that unfolded over the course of one week. Beyond the infrastructure built by OWS protesters in that week, the media were looking for heroes at a time when the outlook was bleakest. Occupy Sandy were also producing their own media and designed a platform called Sandy Story Line for residents to share their experiences via picture, video, and phone. In fact, one of the first purchases from the WePay account was a documentary camera to help residents document damages and to show the public what was happening. Additionally, media outlets covered the work taken on by Occupy Sandy within the first few days of their existence. About two weeks into the effort, major news outlets recognized the movement, not for what it once was, but for what it could do. *The New York Times*, which was very critical of OWS, published a story titled, "Where FEMA Fell Short, Occupy Sandy Was

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⁹⁶Source: Amazon.com/registry/wedding/32TAA123PJR42 Last accessed 5/20/2015

There."⁹⁷ Importantly, the press coverage drove fresh eyes to burgeoning #OccupySandy network on Twitter and Facebook.

Besides the inversion of coordination practices that happened at the start of Occupy Sandy, one other significant reversal was taking place. The vision of Occupy Sandy volunteers was long-term. Diego Ibañez, an organizer with OWS and Occupy Sandy, described the advantages of horizontal organizing during a crisis. "The network agreed that it is a crisis and then we all acted on it," he said. "We didn't ask — we created new channels so people can plug into and then address the crisis. If we could all agree that homelessness or houselessness was a crisis tomorrow, we could tackle it in the way that we tackled the hurricane." Being able to act in concert, without strict lines of communication and authority, allowed many small networks of relief workers to organize themselves according to the community's needs. The longterm vision included using the funds raised to establish centers focused on organizing against racism, poverty and foreclosure, among other local concerns. In this sense, a good deal of the \$1.9 million dollars raised through the WePay went to organizations that were already established in communities for long term rebuilding. Like accepting clothing, this was in stark contrast to the goal of the Red Cross who does not use funds in this way.

Within days of Occupy Sandy NY starting up, many of the same systems were implemented in the Occupy Sandy NJ effort led by members of Occupy Philadelphia, including Nate and Larry from InterOccupy. Mobility through modularity and mutual

⁹⁷ Read the full story here: http://www.nytimes.com/2012/11/11/nyregion/where-fema-fell-short-occupy-sandy-was-there.html

aid were the hallmarks of the movement in the parks. Now, mobility meant OWS could spread across the city and pop up where ever mutual aid was necessary. While no one could have predicted in the parks that "This is just practice," - a familiar chant at actions - much of it was practicing a particular kind of coordination that combines time, space, ideas, human labor, and technology. When net work projects develop, there may be no goal in mind. Yet, when people put the best of their ideas and skills into practice for the betterment of all, great things happen. Occupy Sandy was born of the connections and skills learned in the OWS kitchen, from working on the finances of the movement, in moving from space to space, to reworking the consensus process, and then building and rebuilding digital infrastructures time and time again.

There are a few lessons from Occupy Sandy worth highlighting. While participation in the Occupy Movement waxes and wanes, building databases that include information about the participants as well as the kinds of topics or events of interest to them can help point participants to projects they would like to work on. Coordinating infrastructures like newsletters and phone banking can help maintain network ties during periods of relative stagnation. Moreover, a Facebook page or Twitter account could disappear at the discretion of the corporation that owns it or individuals with administrative access to it, potentially breaking the network into fragments. Simply relying on Facebook, Twitter, or Google can make these networks highly vulnerable to the whims of corporations and government.

The physical sites of Occupy Sandy handled an enormous amount of goods per day. While InterOccupy always envisioned themselves as a network that circulated

ideas, it did not occur to any of us that we could also distribute goods. This fact was obvious when the movement had camps; as protesters were able to feed, clothe, and provide medical services to many on a daily basis. But, after the raids the question remained: how could Occupy enliven a spirit of public service akin to the one felt in the camps? This effort shows networks which move information, can also move goods and people.

Conditions of the crisis still matter. Breaches of norms in everyday life caused by crisis are movement moments that can be politicized. When events like Hurricane Sandy require a strong public response, not only dormant networks, but also databases of volunteers, participants, activists and journalists become indispensable for horizontal organizing. Their continued existence meant that the infrastructure did not need to be built anew every time. Infrastructure design within a slow network movement requires thinking about the constituent elements of organizing, including the tedious tasks of database creation coupled with a multi-sited approach to distribution and storage. Not only do many of the tools and software already exist, but groups like Occupy Sandy provide a historical precedent for what, if further developed, could work even better in the future. The Department of Homeland Security issued a report detailing #OccupySandy, titled "The Resilient Social Network."

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⁹⁸ For the full report, visit:

 $http://homelandsecurity.org/Docs/The \%20 Resilient \%20 Social \%20 Network.pdf \ Last accessed 5/20/2015$

Conclusion

Throughout this dissertation, I explained how a networked social movement emerged in America in September 2011. I illustrated how the functions of the encampments paved the way for the Occupy Movement to endure as a proto-institution with mechanisms for group decision-making and semi-structured mechanisms of participation. From there, I went on to show how the struggle over space and the distribution of OWS across different places lessened the movement's ability to bring in new members, but strengthened the bonds within working groups. It was at this time that InterOccupy tasked itself with creating an infrastructure to be used by groups across the movement. While there were some important successes, by the early fall of 2012 the networks fostered by InterOccupy were going dark.

Superstorm Sandy presented a new opportunity for those who were plugged into these networks and sought to be effective in times of disaster.

With Web 2.0, keywords are a critical part of the infrastructure of the internet. Like categories, keywords have come to dominate the cultural logic and organization of information and knowledge across many domains. Yet, keywords are unlike categories because they serve a critical coordinating function for networked movements. A category like "social justice" is too broad and would return far too many results if queried on a variety of platforms. "Occupy" worked well as a keyword on many platforms because previous uses of the term were not affiliated with an organization and it was not used heavily in domain names. The low rate of use, coupled with other keywords such as "Wall Street," meant that a search engine like

Google would rapidly pick up the increased frequency of use in their algorithm and rank it highly in results. Conversely, a combination like "Occupy" and "Palestine" would not have the same outcome across platforms because for a long time websites used these two terms together.

The openness of "Occupy" as a keyword also meant that anyone with an internet connection could tap into the flow of information with minimal effort and without committing to participating, joining new networks, or even leaving their house. It was an "open-source brand," as one interviewee called it, which allowed anyone to associate it with any cause locally, nationally, or internationally. Seizing local political opportunities and pre-existing networks were important aspects for organizing the movement and measuring successes. For example, Occupy Buffalo activists convinced the City's Sewer Authority to divest 45 million in City funds from JP Morgan Chase and deposited it in a local Credit Union. With Hurricane Sandy on its way, only a few understood its political potential. Most recognized, however, that something must be done immediately to mitigate the hunger and suffering of their neighbors. Linking these on the ground activities to an online infrastructure to manage needs and supplies provided a space for local action to become coordinated nationally.

Over the course of a year, InterOccupy progressed from a platform designed to connect networks of networks into a platform that provided disaster relief on a much larger scale. The chant used by OWS on #D17, "this is just practice," proved to be the underlying message of our activities. In practice, infrastructuring #OccupySandy required InterOccupy and others to tap every pre-existing network, utilize every ICT,

and contribute every skill to get this net work project to function. The lessons and the skills learned in the camps, in the weeks after the raids, in the transition to a virtual organization that coordinates distributed direct actions were all experiences that helped create #OccupySandy.

Most importantly, infrastructure is something that is learned by doing. In this sense, InterOccupy participants learned that in order to be effective they had to be attuned to the affordances and limits of each platform as well as know how the components connected to one another. This indicated that infrastructure is not a resource like any other. When used in conjunction with on-the-ground organizing strategies, it can funnel significant resources to areas and projects in need as well as call into action many who are outside the impacted area. Of course, the conditions of the crisis or interest in the issues still matters significantly for the success of the project.

Networked social movements share information and ideas in order to make decisions about how to take action. Information, how one obtains it and who is excluded from knowing it, plays a critical role in shaping the collective identity, political opinions, and the actions one is willing to take to make change. At the start of the Occupy Movement, information sharing was somewhat haphazard as one node may have an idea, others many pick it up and transmit it through various platforms of communication. One person may tell another or a group. Discussion could originate in a Facebook group, be talked about in a chat room, and then posted to a blog. Dialogue could start at a meeting, then be written up in a shareable document online, and

receive input from hundreds of others through a Facebook group discussion. Validity depended on calls to action travelling widely though the infrastructure as well as the legitimacy of nodes circulating it.

As time wore on, protesters became more instrumental in how they approached sharing information and acting in concert across camps and web platforms. The use of the GA habituated practices of communication routines and roles as well as disciplined protesters in the process of collective decision-making. Facilitated conference calls smoothed out the difficulties of transposing these practices into virtual space. In times of crisis, there was an abundance of information, so protesters relied on respected online hubs to filter and repackage it. Many of the individuals managing the social media for each Occupy group and websites like Storg, InterOccupy, NYCGA, Occupy.net were able to do this work for the movement from their workplaces, which illustrates how critical mobile internet has become for coordinating protests from a distance. The administrators of these hubs often shared membership that overlaid each other, yet membership did not completely overlap one another. For example, a few members of InterOccupy were also part of the Tweetboat and Occupy.net as well as answered emails sent to Storg. By following the infrastructure, I mapped the distribution of personnel between these hubs and charted the development of a small worlds network of information managers as it changed alongside internal and external pressures.

This dissertation illustrates how Occupy harnessed the communication power of the network society and deployed it when the movement needed it most. Routine

users of social media who issue calls for social change see that their Facebook network is not the same as their Twitter network, which is also different from their email lists, blog followers, YouTube subscribers, Reddit readers, and so on. Instead of approaching the many platforms of the internet as obstacles, Occupy protesters adopted all of them. Thus, they avoided the problems experienced by Napster users after the shutdown of the whole platform. Consequently, as the use of communication platforms proliferated, different manifestations of physical protests developed.

By analyzing how the Occupy movement generated ideas, communicated strategies, and shared tactics, my study advances the literature on social movements and STS studies by providing a new model of virtual organizations to explore how network social movements tether the crowds on the internet to the action in the streets. Since infrastructure work takes a significant amount of time, resources, and remains largely invisible, few were able to track the movement after the raids and were surprised to see it reemerge powerfully as Occupy Sandy. Future research on networked social movements should pay close attention to the set of relations embedded in infrastructure as an arena of participation.

As a final point of reflection, this dissertation also serves to document the information labor required to bridge the internet and the streets. I hope some find it useful as a manual for action. Concepts like "clicktivism" and "slacktivism" were popular in the early part of the 21st century to describe those who were signing online petitions or making donations without engaging in street actions, which some believed showed a low level of commitment. "Hashtag activists," those who use Twitter to

distribute calls to action, were also labeled as "armchair activists." All of these conjure images of protesters taking the lazy way to social change. The internet has lowered the costs of massifying certain tactics and the consequence is that these tactics no longer hold the effectiveness they once did. Similarly, many denigrated Occupy protesters for using cell phones and computers. The presence of these artifacts, cell phones and laptops, in the streets signals a major transformation in the information milieu of protesters. The labor of tethering the streets to the internet is not automatic; behind every website are programmers; within every database are managers; the social media accounts require administrators; there is an author for every blog; the email lists need moderators; and the movement needs you.

WORKS CITED

- Allen, John. 2011. "Topological Twists: Power's Shifting Geographies." *Dialogues in Human Geography* 1 (3): 283–98.
- Ambinder, E., Jennings, D. M., Blachman-Biatch, I., Edgemon, K., Hull, P., & Taylor, A. 2013. *The Resilient Social Network:* @ *OccupySandy# SuperstormSandy*. Falls Church, VA: Homeland Security Studies and Analysis Institute.
- Aneesh, A. 2006. Virtual Migration: The Programming of Globalization. Duke University Press.
- Aneesh, A. 2012. "Informationalism." In *The Wiley-Blackwell Encyclopedia of Globalization*. John Wiley & Sons, Ltd.
- Aspen Institute. 2014. *The Promise and Peril of Big Data*. Accessed October 25. http://www.aspeninstitute.org/publications/promise-peril-big-data.
- AT&T Archives . 2012. "Party Lines." AT&T website. http://techchannel.att.com/play-video.cfm/2012/6/6/AT&T-Archives-Party-Lines. Accessed August 27, 2014.
- Baraniuk, Chris. 2013. "Whatever Happened to the Phone Phreaks?" *The Atlantic*. http://www.theatlantic.com/technology/archive/2013/02/whatever-happened-to-the-phone-phreaks/273332/. Last accessed 5/20/2015.
- Barnes, Barry, David Bloor, and John, Henry. 1996. *Scientific Knowledge: A Sociological Analysis*. University of Chicago Press.
- Bateson, M. 1984. With a Daughter's Eye: A Memoir of Margaret Mead and Gregory Bateson. New York: Plume/Penguin.
- Baym, Nancy. 2000. *Tune-In, Log Out: Soaps, Fandom, and Online-Community*. Thousand Oaks, CA: Sage.
- Baym, Nancy. 2010. *Personal Connections in the Digital Age*. Cambridge, UK: Polity.
- Bell Telephone Company. 1911. "Bell Telephone News." *Google Books Archive*. https://books.google.com/books?id=0JrmAAAAMAAJ&pg=PA32-IA48&lpg=PA32-IA48&dq=Bell+Telephone+News.&source=bl&ots=fyK5VGu46y&sig=RRpZ14LVRWqUL7YwXfa5Kpc93JQ&hl=en&sa=X&ei=qbtvVav2O8zUoATBmILwAQ&ved=0CEEQ6AEwCQ#v=onepage&q=Bell%20Telephone%20News. &f=false Last Accessed 5/20/2015

- Benford, R. 1997. "An Insider's Critique of the Social Movement Framing Perspective" *Sociological Inquiry* 67:409–430.
- Benford, Robert D., and David A. Snow. 2000. "Framing Processes and Social Movements: An Overview and Assessment." *Annual Review of Sociology* 26 (January): 611–39.
- Bennett, W. Lance, and Alexandra Segerberg. 2012. "The Logic of Connective Action." *Information, Communication & Society* 15 (5): 739–68.
- Berardi, Franco. 2005. "What does Cognitariat Mean? Work, Desire and Depression." *Cultural Studies Review.* 11.2: 57-63.
- Bijker, Wiebe E., Thomas Parke Hughes, and Trevor J. Pinch. 1987. The Social Construction of Technological Systems: *New Directions in the Sociology and History of Technology*. MIT Press.
- Bijker, W. and J. Law (Eds.). 1992. *Shaping Technology, Building Society: Studies in Sociotechnical Change*. Cambridge, Mass, MIT Press.
- Bowker, G. and Star, S. 1999. *Sorting Things Out: Classification and Its Consequences*. Cambridge, MA: MIT Press
- Bowker, G. C., Baker, K., Millerand, F., & Ribes, D. (2010). 'Toward Information Infrastructure Studies: Ways of Knowing in a Networked Environment', in *International Handbook of Internet Research* (Springer Netherlands): 97-117.
- Bowker, Geoffrey. 1994. "Information Mythology and Infrastructure." Pp. 231-247 in Lisa Bud-Frierman, ed. *Information Acumen: The Understanding and Use of Knowledge in Modern Business*. London: Routledge.
- Boyd, Danah, and Kate Crawford. 2012. "Critical Questions for Big Data: Provocations for a Cultural, Technological, and Scholarly Phenomenon." *Information, Communication & Society* 15 (5): 662–79.
- Breines, W. 1989. Community and Organization in the New Left, 1962-1968: The Great Refusal. Rutgers University Press, New Brunswick.
- Bruni, Attila, Trevor Pinch, and Cornelius Schubert. 2014. "Technologically Dense Environments: What For? What Next?" *Tecnoscienza: Italian Journal of Science & Technology Studies* 4 (2): 51–72.
- Bruni, Attila. 2005. "Shadowing Software and Clinical Records: On the Ethnography of Non-humans and Heterogeneous Contexts." *Organization* 12(3):357-378.

- Bruni, Attila. 2013. "STS, ITALIA." *Tecnoscienza: Italian Journal of Science & Technology Studies* 3 (2): 3–22.
- Bruns, A. & Burgess, J. 2011. "The Use of Twitter Hashtags in the Formation of Ad Hoc Publics." Paper presented at the *European Consortium of Political Research Conference*, Reykjavík, 26 August 2011.
- Burns, D. 2007. *Systemic Action Research: A strategy for whole system change*. Bristol: Policy Press.
- Calhoun, C. 1993. "New Social-Movements of the Early-19th-Century." *Social Science History* 17 (3): 385–427.
- Callon, Michel 1986. "Some Elements of a Sociology of Translation: Domestication of the Scallops and the Fishermen of St Brieuc Bay." pp. 196–233 in *Power, Action and Belief: A New Sociology of Knowledge*, edited by John Law. London: Routledge & Kegan Paul.
- Carabine, J. 2001. "A Genealogical Analysis" in *Discourse as Data: A Guide for Analysis*. Thousand Oaks: Sage.
- Casper, Monica J., and Adele E. Clarke. 1998. "Making the Pap Smear into the 'Right Tool' for the Job: Cervical Cancer Screening in the USA, circa 1940-95." *Social Studies of Science* 28 (2): 255–90.
- Castells, Manuel, João Caraça, and Gustavo Cardoso. 2012. *Aftermath: The Cultures of the Economic Crisis*. Oxford University Press. http://books.google.com/books?hl=en&lr=&id=y-QRYrWJlzcC&oi=fnd&pg=PP2&dq=%22networked+social+movements%22&ots=bxrDvV9Jb9&sig=oW6mAtu2DTTcsXWRMMQJb8GpVz8.
- Castells, Manuel, Shujiro Yazawa, and Emma Kiselyova. 1995. "Insurgents Against the Global Order: A Comparative Analysis of the Zapatistas in Mexico, the American Militia and Japan's AUM Shinrikyo." *Berkeley Journal of Sociology* 40 (January): 21–59.
- Castells, Manuel. 1976. "Urban Sociology and Urban Politics: From a Critique to New Trends of Research." *Comparative Urban Research*, vol. III, n.1. (Reprinted in John Walton, ed., The City in Comparative Perspective. Beverly Hills: Sage
- Castells, Manuel. 1977. "Towards a Political Urban Sociology." *Captive Cities*. Ed. Michael Harloe. London: John Wiley. 61-78.
- Castells, Manuel. 1978. *City, Class, and Power*. London: Mac Millan, and New York: St Martin's Press.

- Castells, Manuel. 1983. The City and the Grassroots: A Cross-Cultural Theory of Urban Social Movements. University of California Press.
- Castells. Manuel. 1996. *The Rise of the Network Society, The Information Age: Economy, Society and Culture Vol. I.* Cambridge: Blackwell.
- Castells, Manuel. 1999. "Grassrooting the Space of Flows." *Urban Geography* 20 (4): 294–302.
- Castells, Manuel. 2005. "The Network Society: From Knowledge to Policy" in Castells, Manuel, and Gustavo Cardoso, eds. *The Network Society: From knowledge to policy*. Center for Transatlantic Relations, Paul H. Nitze School of Advanced International Studies, Johns Hopkins University.
- Castells, Manuel. 2007. "Communication, Power and Counter-Power in the Network Society." *International Journal of Communication* 1 (1): 29.
- Castells, Manuel. 2008. "The New Public Sphere: Global Civil Society, Communication Networks, and Global Governance." *The Annals of the American Academy of Political and Social Science* 616 (1): 78–93.
- Castells, Manuel. 2009. Communication Power. Oxford University Press.
- Castells, Manuel. 2011. "Network Theory A Network Theory of Power." *International Journal of Communication* 5: 15.
- Castells, Manuel. 2012. *Networks of Outrage and Hope: Social Movements in the Internet Age.* Malden: Polity Press.
- Charmaz, K. 2001. "Grounded Theory" in Robert Emerson, ed. *Contemporary Field Research*. Prospect Heights, IL: Waveland Press.
- Chesters, Graeme, and Ian Welsh. 2005. "Complexity and Social Movement(s) Process and Emergence in Planetary Action Systems." *Theory, Culture & Society* 22 (5): 187–211.
- Clarke, Adele E. 2003. "Situational Analyses: Grounded Theory Mapping After The Postmodern Turn." *Symbolic Interaction* 26(4):553–576.
- Clarke, Adele E.. 2005. Situational Analysis: Grounded Theory After the Postmodern Turn. Thousand Oaks, CA: Sage.
- Cohen, Jean. 1985. "Strategy or Identity: New Theoretical Paradigms and Contemporary Social Movements." *Social Research* 52 (4): 663–716.

- Coleman, Gabriella. 2010. "Ethnographic Approaches to Digital Media." *Annual Review of Anthropology* 39:487-505.
- Coleman, Gabriella. 2011. "Hacker Politics and Publics." *Public Culture* 23(3): 511-516.
- Coleman, Gabriella. 2012. Coding Freedom. Princeton NJ: Princeton.
- Coleman, Gabriella. 2014. *Hacker, Hoaxer, Whistleblower, Spy: The Many Faces of Anonymous*. 1 edition. London; New York: Verso.
- Collins, H. M. 1984. "Concepts and Methods of Participatory Fieldwork" in Bell, C., & Roberts, H. (eds.), *Social Researching*. Routledge, 54-69.
- Collins, H. M. 1998. "The Meaning of Data: Open and Closed Evidential Cultures in the Search for Gravitational Waves." *American Journal of Sociology*, 10(2): 293-337.
- Collins, Harry. 2010. *Gravity's Shadow: The Search for Gravitational Waves.*University of Chicago Press.
- Conrad, Don. 2009. Telephone Tales. Dog Ear Publishing.
- Counter Cartographies Collective. 2012. "Counter (Mapping) Actions: Mapping as Militant Research." *ACME: An International E-Journal for Critical Geographies* 11 (3): 439–66.
- Coy, Patrick G. 2003. Consensus Decision Making, Northern Ireland and Indigenous Movements. Elsevier.
- Cress, Daniel, and David Snow. 2000. "The Outcomes of Homeless Mobilization: The Influence of Organization, Disruption, Political Mediation, and Framing" *American Journal of Sociology*. 105(4):1063-1104.
- Cumbers, Andy, Paul Routledge, and Corinne Nativel. 2008. "The Entangled Geographies of Global Justice Networks." *Progress in Human Geography* 32(2): 183–201.
- Danet B. 2001. Cyberpl@y: Communicating Online. Oxford/New York: Berg.
- DatAnalysis15m. 2015. DatAnalysis15M Web Report on Networked Social Movements. https://datanalysis15m.wordpress.com/. Last accessed May 20, 2015
- de Certeau, Michel 1988. *The Practice of Everyday Life*. Los Angeles: University of California Press.

- De Genova, Nicholas. 2013. "We Are of the Connections': Migration, Methodological Nationalism, and 'Militant Research." *Postcolonial Studies* 16 (3): 250–58.
- Dean, Mitchell. 1999. Governmentality: *Power and Rule in Modern Society*. London: Sage Publications.
- Deleuze, G. (1978). Lecture transcripts on Spinoza's concept of affect. Emilie Deleuze Julien Deleuze.

 http://www.webdeleuze.com/php/texte.php?cle=14&groupe=Spinoza&langue=2 Last accessed 5/20/2015.
- Deleuze, Gilles and Félix Guattari. 1980. *A Thousand Plateaus*. London and New York: Continuum.
- Delia, Jesse. 1987. "Communication Research: A History." In *Handbook of Communication Science*, Charles Berger and Steven Chaffee (eds.) Pp. 20–98. Sage.
- Della Porta, Donatella, and Mario Diani. 2009. *Social Movements: An Introduction*. John Wiley & Sons.
- Deseret News. 1919. "Telephone Company Seeks 'Party Line Pirates," June 23. *Google News Archive*.

 https://news.google.com/newspapers?nid=336&dat=19190624&id=FKdOAA
 AAIBAJ&sjid=4rUDAAAAIBAJ&pg=4534,5549064&hl=en.
- Diani, Mario, and Doug McAdam. 2003. Social Movements and Networks: Relational Approaches to Collective Action. Oxford University Press.
- Díaz Orueta, Fernando. 2007. "Madrid: Urban Regeneration Projects and Social Mobilization." *Cities* 24 (3): 183–93.
- Dohan, D. & Sanchez-Jankowski, M. 1998. "Using computers to analyze ethnographic field data: Theoretical and practical considerations." Annual Review of Sociology 24:477–49
- Donovan, Joan and Karen Baker. 2011. "The Shape of Information Management: Fostering Collaboration across Data, Science, and Technology in a Design Studio." *Scripps Institution of Oceanography Technical Report*. Scripps Institution of Oceanography, UC San Diego.
- Eagleton-Pierce, Matthew. 2001. "The Internet and the Seattle WTO Protests." *Peace Review* 13 (3): 331–37.

- Earl, Jennifer and Alan Schussman. 2014. "The New Site of Activism: On-Line Organizations, Movement Entrepreneurs, and the Changing Location of Social Movement Decision Making." In *Consensus Decision Making, Northern Ireland and Indigenous Movements* 24:155–87. Research in Social Movements, Conflicts and Change. Emerald Group Publishing Limited.
- Earl, Jennifer, Andrew Martin, John D. McCarthy, and Sarah A. Soule. 2004. "The Use of Newspaper Data in the Study of Collective Action." *Annual Review of Sociology* 30 (1): 65–80.
- Earl, Jennifer, and Katrina Kimport. 2008. "The Targets of Online Protest." *Information, Communication & Society* 11 (4): 449–72.
- Earl, Jennifer, Sarah A. Soule and John D. McCarthy. 2003. "Protest under Fire? Explaining the Policing of Protest" *American Sociological Review* 68(4):581-606.
- Earl, Jennifer. 2007. "Leading Tasks in a Leaderless Movement The Case of Strategic Voting." *American Behavioral Scientist* 50 (10): 1327–49.
- Earl, Jennifer. 2010. "The Dynamics of Protest-Related Diffusion on the Web." *Information, Communication & Society* 13 (2): 209–25.
- Earl, Jennifer. 2012. "Private Protest?" *Information, Communication & Society* 15 (4): 591–608.
- Edwards, P. N., Jackson, S. J., Chalmers, M. K., Bowker, G. C., Borgman, C. L., Ribes, D., Burton, M., & Calvert, S. (2013). *Knowledge Infrastructures: Intellectual Frameworks and Research Challenges*. Ann Arbor: Deep Blue.
- Epstein, Steven. 1996. *Impure science: AIDS, activism, and the politics of knowledge*. Berkeley: University of California Press.
- Epstein, Steven. 2007. *Inclusion: The politics of difference in medical research*. Chicago: University of Chicago Press.
- Evening Independent. 1944. "Golden Rule Also Applies to Use of Party Lines," December 14. *Google News Archive*. https://news.google.com/newspapers?nid=950&dat=19441214&id=svZPAAA AIBAJ&sjid=F1UDAAAAIBAJ&pg=4169,1604632&hl=en.
- Feder, Jesse M. 2003. "Is Betamax Obsolete: Sony Corp. of America v. Universal City Studios, Inc. in the Age of Napster." *Creighton Law Review* 37: 859.
- Feixa, Carles, Inês Pereira, and Jeffrey S. Juris. 2009. "Global Citizenship and the 'New, New' Social Movements Iberian Connections." *Young* 17 (4): 421–42.

- Feuer, A. 2012. "Where FEMA Fell Short, Occupy Sandy Was There." *New York Times*, November 9. Retrieved July1, 2013 (http://www.nytimes.com/2012/11/11/nyregion/where-fema-fell-short-occupy-sandy-was-there.html?pagewanted=all)
- Fischer, Claude S. 1994. *America Calling: A Social History of the Telephone to 1940*. University of California Press.
- Foucault, M. 1972. The Archaeology of Knowledge. London: Tavistock Publications.
- Foucault, M. 1975. I, Pierre Riviere, having Slaughtered My Mother, My Sister, and My Brother ...: A Case of Parricide in the 19th Century. Lincoln: University of Nebraska Press. 1
- Foucault, M. 1984. "The Order of Discourse" in M. Shapiro ed. *Language and Politics*. New York: New York University Press.
- Foucault, M. 1990. *The History of Sexuality: Vol. 1*. New York: Vintage Books.
- Foucault, Michel. 1995. *Discipline and Punish: The Birth of the Prison*. New York: Vintage Books.
- Foucault, Michel. 2001. Fearless Speech. Zone Books.
- Foucault, Michel. 2003. "Security Territory and Population" (Pp. 259-262), "Technologies of the Self" (Pp. 145-169), and "The Subject and Power" (Pp. 126-144) in *The Essential Foucault*. N. Rose and P. Rabinow (eds.). New York: New Press.
- Francescani, Chris. 2012. "Insight: Can Occupy Wall Street survive?" *Reuters*. June 8. Retrieved July 14, 2012: http://in.reuters.com/article/2012/06/07/us-usa-occupywallstreet-idINBRE85606J20120607
- Freeman, Jo. 1972. "The Tyranny of Structurelessness." *Berkeley Journal of Sociology* 17 (January): 151–64.
- Freire, Paulo. 1993. *Pedagogy of the Oppressed*. New rev. 20th-Anniversary ed. New York: Continuum.
- Fuchs, Christian. 2006. "The Self-Organization of Social Movements." *Systemic Practice and Action Research* 19 (1): 101–37.
- Gamson, W. 1975. The Strategy of Social Protest. Homewood, IL: The Dorsey Press.

- Ganz, Marshall. 2000. "Resources and Resourcefulness: Strategic Capacity in the Unionization of California Agriculture, 1959-1966." *American Journal of Sociology* 105 (4): 1003-1062.
- Garrett, Kelly R. 2006. "Protest in an Information Society: A Review of Literature on Social Movements and New ICTs." *Information, Communication & Society* 9 (2): 202–24.
- Gillespie, Tarleton. 2010. "The Politics of 'platforms." *New Media & Society* 12 (3): 347–64.
- Gladwell, Malcolm. 2010a. "Small Change." *The New Yorker*, October 4. http://www.newyorker.com/reporting/2010/10/04/101004fa_fact_gladwell.
- Glaser, B. and Strauss, A. 1967. *The Discovery of Grounded Theory: Strategies for Qualitative Research.* New Brunswick, NJ: Aldine Transaction.
- Goffman, Erving. 1959. *The Presentation of Self in Everyday Life*. New York: Doubleday Anchor.
- Goffman, Erving 1961. Asylums: Essays on the social situation of mental patients and other inmates. Anchor Books.
- Goffman, Erving. 1974. *Frame Analysis: An Essay on the Organization of Experience*. New York: Harper and Row.
- Goodwin, Jeff, and James M. Jasper. 2003. *Rethinking Social Movements: Structure, Meaning, and Emotion*. Rowman & Littlefield Publishers.
- Gort, Michael, and Nakil Sung. 1999. "Competition and Productivity Growth: The Case of the U.S. Telephone Industry." *Economic Inquiry* 37 (4): 678–91.
- Green, Matthew. 2002. "Napster Opens Pandora's Box: Examining How File-Sharing Services Threaten the Enforcement of Copyright on the Internet." *Ohio State Law Journal* 63: 799.
- Greenfield, Patricia, and Jessica Beagles-Roos. 1988. "Radio vs. Television: Their Cognitive Impact on Children of Different Socioeconomic and Ethnic Groups." *Journal of Communication* 38 (2): 71–92.
- Grier, David Alan. 2013. When Computers Were Human. Princeton University Press.
- Gurr, T. R.1970. Why Men Rebel. Princeton, N.J.: Princeton University Press.
- Hafner, Katie, and John Markoff. 1995. *Cyberpunk: Outlaws and Hackers on the Computer Frontier*. Revised. Simon and Schuster.

- Halvorsen, Sam. 2012. "Beyond the Network? Occupy London and the Global Movement." *Social Movement Studies* 11 (3-4): 427–33.
- Hannigan, John A. 1985. "Alain Touraine, Manuel Castells and Social Movement Theory a Critical Appraisal." *The Sociological Quarterly* 26 (4): 435–54.
- Haraway, Donna. 1988. "Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective." *Feminist Studies* 14 (3): 575–99.
- Haraway, Donna. 2010. "When Species Meet: Staying with the Trouble." *Society and Space* 28 (1): 53–55.
- Hardt, M. and Negri, A. 2000. *Empire*. Boston: Harvard University Press.
- Hayles, Katherine. 1999. How We Became Posthuman: Virtual Bodies in Cybernetics, Literature, and Informatics. Chicago: Univ. Chicago Press.
- Hedgecoe, Adam. 2004. *The Politics of Personalised Medicine Pharmacogenetics in the Clinic*. Cambridge: Cambridge University Press.
- Heijden, Hein-Anton van der. 2014. *Handbook of Political Citizenship and Social Movements*. Edward Elgar Publishing.
- Hess, David. 2001. "Ethnography and the Development of Science and Technology Studies" in Atkinson, Paul (ed.). *Handbook of Ethnography*. Sage
- Hillstrom, Kevin, and Laurie Collier Hillstrom. 2007. *The Industrial Revolution in America Communications, Agriculture and Meatpacking,*Overview/Comparison. Abc-Clio Inc.
- Howard, Philip. N. 2010. The Digital Origins of Dictatorship and Democracy: Information Technology and Political Islam. Oxford University Press.
- Hughes, T. P. (1983). Networks of Power: Electrification in Western Society, 1880–1930 (Baltimore: John Hopkins University Press).
- Irani, L. 2013. "The Cultural Work of Microwork." *New Media & Society*. November. 0(0): 1-20.
- Irani, Lilly C., and M. Six Silberman. 2013. "Turkopticon: Interrupting Worker Invisibility in Amazon Mechanical Turk." In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*, 611–20. CHI '13. New York, NY, USA: ACM.
- Irwin, Alan. 2001. "Constructing the Scientific Citizen: Science and Democracy in the Biosciences." *Public Understanding of Science* 10:1-18.

- Jenkins, J. Craig, and Craig M. Eckert. 1986. "Channeling Black Insurgency: Elite Patronage and Professional Social Movement Organizations in the Development of the Black Movement." *American Sociological Review* 51 (6): 812–29.
- Jenkins, J. Craig. 1983. "Resource Mobilization Theory and the Study of Social Movements." *Annual Review of Sociology* 9 (January): 527–53.
- Johnston, H., Laraña, E., & Gusfield, J. R. (1994). "Identities, grievances, and new social movements." In E. Laraña, H. Johnston, & J.
- Juris, J. 2008. *Networking Futures: The Movements against Corporate Globalization*. US: Duke University Press.
- Juris, Jeffrey S. 2004. "Networked Social Movements: Global Movements for Global Justice." Edited by M. Castells. *Network Society: A Cross-Cultural Perspective*, 341–62.
- Juris, Jeffrey S. 2005. "The New Digital Media and Activist Networking within Anticorporate Globalization Movements." *The Annals of the American Academy of Political and Social Science* 597 (1): 189–208.
- Juris, Jeffrey S. 2007. "Practicing Militant Ethnography with the Movement for Global Resistance in Barcelona." *Constituent Imagination: Militant Investigations, Collective Theorization*, 164–76.
- Juris, Jeffrey S. 2012. "Reflections On# Occupy Everywhere: Social Media, Public Space, and Emerging Logics of Aggregation." *American Ethnologist* 39 (2): 259–79.
- Juris, Jeffrey Scott, and Geoffrey Henri Pleyers. 2009. "Alter-Activism: Emerging Cultures of Participation Among Young Global Justice Activists." *Journal of Youth Studies* 12 (1): 57–75.
- Karasti, Helena., Karen S. Baker, and Florence Millerand. 2010. "Infrastructure Time: Long-term Matters in Collaborative Development." *Computer Supported Cooperative Work* 19(3-4):377-415.
- Kargon, Robert, and Arthur P. Molella. 2004. "The City as Communications Net: Norbert Wiener, the Atomic Bomb, and Urban Dispersal." *Technology and Culture* 45 (4): 764–77.
- Katz, Elihu, Hadassah Haas, and Michael Gurevitch. 1973. "On the Use of the Mass Media for Important Things." *American Sociological Review* 38 (2): 164–81.

- Katz, J. 2001. "Analytic Induction Revisited" in Robert Emerson, ed. *Contemporary Field Research*, 2nd Edition. Prospect Heights, IL: Waveland Press.
- Kelty, Christopher, Aaron Panofsky, Morgan Currie, Roderic Crooks, Seth Erickson, Patricia Garcia, Michael Wartenbe, and Stacy Wood. 2014. "Seven Dimensions of Contemporary Participation Disentangled." *Journal of the Association for Information Science and Technology*. 66(3): 474-478.
- Kemmis, Stephen., and Robin McTaggart. 2000. "Participatory Action Research". Pp. 567–605 in Norman K. Denzin and Yvonna S. Lincoln, eds. Handbook of *Qualitative Research* (2nd ed.) Thousand Oaks, CA: Sage.
- Kendall L. 2002. *Hanging Out in the Virtual Pub: Masculinities and Relationships Online*. Berkeley: Univ. Calif. Press.
- Klein, Benjamin, Andres V. Lerner, and Kevin M. Murphy. 2002. "The Economics of Copyright 'Fair Use' in a Networked World." The American Economic Review 92 (2): 205–8.
- Knabb, Ken, ed. 2007. *Situationist International Anthology*. Revised & Expanded edition. Berkeley, CA: Bureau of Public Secrets.
- Knorr-Cetina, K. 1999. *Epistemic Cultures: How the Sciences Make Knowledge*. Cambridge, MA: Harvard University Press.
- Knorr-Cetina, K. and M. Mulkay, Eds. 1983. *Science Observed: Perspectives on the Social Study of Science*. London, UK: Sage.
- Kunda, Gideon. 2006. Engineering Culture: Control and Commitment in a High-Tech Corporation. Revised edition. Philadelphia, PA: Temple University Press.
- Lampland, Martha, and Susan Leigh Star, (eds). 2009. Standards and Their Stories: How Quantifying, Classifying, and Formalizing Practices Shape Everyday Life. New York: Cornell University.
- Langman, Lauren. 2005. "From Virtual Public Spheres to Global Justice: A Critical Theory of Internetworked Social Movements." *Sociological Theory* 23 (1): 42–74
- Lapsley, Phil. 2013a. Exploding the Phone. New York: Grove Press.
- Lapsley, Phil. 2013b. "The Definitive Story of Steve Wozniak, Steve Jobs, and Phone Phreaking." *The Atlantic*. February 20. http://www.theatlantic.com/technology/archive/2013/02/the-definitive-story-of-steve-wozniak-steve-jobs-and-phone-phreaking/273331/.

- Latour, B. 2008. "Where are the missing masses? Sociology of a few mundane artefacts" Pp. 151-180 in D. Johnson, and J. Wetmore eds. Technology and Society. *Building Our Sociotechnical Future*. Cambridge, MA: MIT Press.
- Latour, B. and S. Woolgar 1986. *Laboratory Life: the Social Construction of Scientific Facts*. London UK: Sage.
- Lawrence, Thomas B., Cynthia Hardy, and Nelson Phillips. 2002. "Institutional Effects of Interorganizational Collaboration: The Emergence of Proto-Institutions." *Academy of Management Journal* 45 (1): 281–90.
- Leach, Darcy K. 2005. "The Iron Law of What Again? Conceptualizing Oligarchy Across Organizational Forms" *Sociological Theory* 23(3): 312-337.
- Light, Jennifer S. 1999. "When Computers Were Women." *Technology and Culture* 40 (3): 455–83.
- Lotan, G., Graeff, E., Ananny, M., Garrney, D., Pearce, I. and Boyd, D. 2010. "The revolutions were tweeted: information flows during the 2011 Tunisian and Egyptian revolutions." *International Journal of Communication*, 5:1375–1405.
- Martin, Isaac. 2015. Rich People's Movements: Grassroots Campaigns to Untax the One Percent. Reprint edition. S.l.: Oxford University Press.
- Malo de Molina, Marta. 2004a. "Common notions, part 1: workers-inquiry, coresearch, consciousness-raising." *European Institute for Progressive Cultural Politics*. Retrieved February 13: 2014.
- Malo de Molina, Marta. 2004b. "Common Notions, Part 2: Institutional Analysis, Participatory Action-Research, Militant Research." *European Institute for Progressive Cultural Politics*. Retrieved February 13: 2014.
- McAdam, D. 1982. *Political Process and the Development of Black Insurgency*, 1930–1970. Chicago: University of Chicago Press.
- McAdam, D. and Y. Su. 2002. "The War at Home: Antiwar Protests and Congressional Voting, 1965–1973." American Sociological Review 67:696–721.
- MacAdam, D. 1994. "Culture and Social Movements" in Enrique Laraña et al. (eds) *New Social Movements: From Ideology to Identity*. Philadelphia: Temple University Press.
- McAdam, D., McCarthy, J. D., & Zald, M. N. 1996. Comparative Perspectives on Social Movements: Political Opportunities, Mobilizing Structures, and Cultural Framing. Cambridge University Press, Cambridge.

- McAdam, Doug, Sidney Tarrow, and Charles Tilly. 2001. *Dynamics of Contention*. New York: Cambridge University Press.
- McAdam, Doug. 1996. "Movement Strategy and Dramaturgic Framing in Democratic States: The Case of the American Civil Rights Movement." *Research on Democracy and Society* 3:155-76.
- McAdam, Doug. 1983. "Tactical Innovation and the Pace of Insurgency." *American Sociological Review* 48:735–54.
- McAdam, Doug. 2003. "Beyond Structural Analysis: Toward a More Dynamic Understanding of Social Movements." In Mario Diani and Doug McAdam (eds.) *Social Movements and Networks: Relational Approaches to Collective Action.* Oxford University Press. Pp. 281–98.
- McCammon, H. 2003. "Out of the Parlors and into the Streets": The Changing Tactical Repertoire of the U.S. Women's Suffrage Movements." *Social Forces* 81(3):787-818.
- McCarthy, J. D. 1987. 'Pro-Life and Pro-Choice Mobilization: Infrastructure Deficits and New Technologies', in M. N. Zald & J. D. McCarthy (eds.) *Social movements in an organizational society*. New Brunswick, NJ: Transaction Books): 49-66.
- McCarthy, John D. and Mayer N. Zald. 2001. "The Enduring Vitality of the Resource Mobilization Theory of Social Movements." in Jonathan H. Turner (ed.) *Handbook of Sociological Theory*. Springer. Pp. 533-565
- McCarthy, John D., and Mayer N. Zald. 1977. "Resource Mobilization and Social Movements: A Partial Theory." *American Journal of Sociology* 82 (6): 1212–41.
- McCourt, Tom, and Patrick Burkart. 2003. "When Creators, Corporations and Consumers Collide: Napster and the Development of On-Line Music Distribution." Media, Culture & Society 25 (3): 333–50.
- McCourt, Tom, and Patrick Burkart. 2003. "When Creators, Corporations and Consumers Collide: Napster and the Development of On-Line Music Distribution." *Media, Culture & Society* 25 (3): 333–50.
- McGowan, Michael. 2010. "The Rise of Computerized High Frequency Trading: Use and Controversy." *Duke Law and Technology Review* No. 016.
- McIntyre, A. 2008. *Participatory Action Research*. Thousand Oaks: Sage Publications.

- McLuhan, Marshall. 2003. *Understanding Media: The Extensions of Man: Critical Edition. Critical edition*. Corte Madera, CA: Gingko Press.
- Melucci, A. 1981. "Ten hypotheses for the analysis of new movements." *Contemporary Italian Sociology*, 173-194.
- Melucci, Alberto. 1980. "The new social movements: a theoretical approach." *Social Science Information*, 19(2), 199-226.
- Melucci, Alberto. 1985. "The Symbolic Challenge of Contemporary Movements." *Social Research* 52 (4): 789–816.
- Melucci, Alberto. 1996. *Challenging Codes: Collective Action in the Information Age*. University of Chicago Press.
- Michels, Robert. 1915. *Political Parties: A Sociological Study of the Oligarchical Tendencies of Modern Democracy*. New York: The Free Press.
- Middeljans, April. 2010. "Weavers of Speech": Telephone Operators as Defiant Domestics in American Literature and Culture." *Journal of Modern Literature* 33 (3): 38–63.
- Miller, D., and D. Slater. 2000. *The Internet: An Ethnographic Approach*. Oxford/New York: Berg.
- Milwaukee Journal. 1959. "Listening in on the Party Line," January 23. https://news.google.com/newspapers?nid=1499&dat=19590123&id=195QAA AAIBAJ&sjid=rCUEAAAAIBAJ&pg=5655,1047020&hl=en.
- Morris, A.1984. *The Origins of the Civil Rights Movement*. New York: The Free Press.
- Morris, A.1981. "Black southern student sit-in movement: an analysis of internal organization." *American Sociological Review* 46:744-67.
- Morris, Aldon D., and Carol McClurg Mueller. 1992. Frontiers in Social Movement Theory. Yale University Press.
- Mowshowitz, Abbe. 1997. "On the Theory of Virtual Organization." Systems *Research and Behavioral Science* 14 (6): 373–84.
- Mukerji, C. 1989. A Fragile Power: Scientists and the State. Princeton, NJ: Princeton University

- Murphree, Vanessa D. 2003. "The Selling of Civil Rights: The Communication Section of the Student Nonviolent Coordinating Committee." *Journalism History* 29 (1): 21–31.
- Myers, Daniel J. 2000. "The Diffusion of Collective Violence: Infectiousness, Susceptibility, and Mass Media Networks." *American Journal of Sociology* 106 (1): 173–208.
- Myneni, L., M. Ross, D. Hendrix, and N. Narayanan 2008. "Studio-based learning in CS2: An experience report." in *Proceedings of the 46th ACM Southeast Conference*. New York, NY: ACM Press. Pp. 253-255
- Neary, John 1968. "Julian Bond, A Militant Inside the System," *Life*, 8 Nov. 1968, 46: 1140.
- Negroponte N. 1996. Being Digital. New York: Vintage Books.
- Offe, Claus. 1985. "New Social Movements: Challenging the Boundaries of Institutional Politics." *Social Research* 52 (4): 817–68.
- Oliver P, Johnson H. 2000. "What a good idea! Ideology and frames in social movement research." *Mobilization* 5:37–54.
- Olson, Mancur. 2009. The Logic of Collective Action. Harvard University Press.
- Olzak, S. and S. Uhrig. 2001. "The Ecology of Tactical Overlap." *American Sociological Review* 66(5): 694-717.
- Paterson, Matthew. 1999. "Interpreting Trends in Global Environmental Governance." *International Affairs* 75 (4): 793–802.
- Pellegrino, Giuseppina. 2007. "Discourses on Mobility and Technological Mediation: The Texture of Ubiquitous Interaction." *Psychnology Journal* 5(1):59-81.
- Pfaffenberger B. 1996. "If I want it, it's OK": Usenet and the (outer) limits of free speech. *Inf. Soc.* 12(4):365–86.
- Pichardo, Nelson A. 1997. "New Social Movements: A Critical Review." *Annual Review of Sociology* 23 (January): 411–30.
- Pickering, A. 1995. *The Mangle of Practice: Time, Agency*, and Science. Chicago, IL: University.
- Pinch, T. J., & Collins, H. M. 1984. "Private Science and Public Knowledge: the Committee for the Scientific Investigation of the Claims of the Paranormal and Its Use of the Literature." *Social Studies of Science* 14: 521-46.

- Piven, F. and R. Cloward. 1979. *Poor People's Movements*. New York: Vintage Books.
- Piven, Frances Fox, and Richard A. Cloward. 1991. "Collective Protest: A Critique of Resource Mobilization Theory." *International Journal of Politics, Culture, and Society* 4 (4): 435–58.
- Polletta, Francesca. 1998. "Contending Stories: Narrative in Social Movements." *Qualitative Sociology* 21(4):419-446.
- Polletta, Francesca and James Jasper. 2001. "Collective Identity in Social Movements" *Annual Review of Sociology* 27: 283-305.
- Polletta, Francesca. 2004. Freedom is an Endless Meeting: Democracy in American Social Movements. University of Chicago Press.
- Polletta, Francesca. 2006. *It Was Like a Fever: Storytelling in Protest and Politics*. University of Chicago Press.
- Portelli, Alessandro. 1981. "The Peculiarities of Oral History." In *History Workshop Journal*, 12:96–107. Oxford Univ Press.
- Price, Charles, Donald Nonini, and Erich Fox Tree. 2008. "Grounded Utopian Movements." *Anthropological Quarterly* 81 (1): 127–59.
- Prida, Ramón. 1914. From Despotism to Anarchy. El Paso Printing Company.
- Reason, P. & Bradbury, H., (Ed.) *The Sage Handbook of Action Research*.

 Participative Inquiry and Practice. 1st Edition. London: Sage, 2001.
- Reason, P. & Rowan, J. 1981. *Human Inquiry: A Sourcebook of New Paradigm Research*. London: Wiley.
- Reason, P. 1995. Participation in Human Inquiry. London: Sage.
- Riehl, Damien A. 2000. "Peer-to-Peer Distribution Systems: Will Napster, Gnutella, and Freenet Create a Copyright Nirvana or Gehenna." *William Mitchell Law Review* 27: 1761.
- Roediger, David R., and Elizabeth D. Esch. 2012. *The Production of Difference: Race and the Management of Labor in U.S. History*. OUP USA.
- Rose, Nikolas. 2006. The Politics of Life Itself. Princeton: Princeton University Press.

- Rosenbaum, Ron. 2011. "'Secrets of the Little Blue Box.'" *Slate*, October 7. http://www.slate.com/articles/technology/the_spectator/2011/10/the_article_th at_inspired_steve_jobs_secrets_of_the_little_blue_.html.
- Ross, Joel, Lilly Irani, M. Six Silberman, Andrew Zaldivar, and Bill Tomlinson. 2010. "Who Are the Crowdworkers?: Shifting Demographics in Mechanical Turk." In *CHI '10 Extended Abstracts on Human Factors in Computing Systems*, 2863–72. CHI EA '10. New York, NY, USA: ACM.
- Sangster, Joan. 1978. "The 1907 Bell Telephone Strike: Organizing Women Workers." *Labour / Le Travail* 3: 109-130.
- Schacht, John N. 1975. "Toward Industrial Unionism: Bell Telephone Workers and Company Unions, 1919–1937." *Labor History* 16 (1): 5–36.
- Schussman, Alan, and Jennifer Earl. 2004. "From Barricades to Firewalls? Strategic Voting and Social Movement Leadership in the Internet Age." *Sociological Inquiry* 74 (4): 439–63.
- Segerberg, A. and Bennett, W. L. 2011. "Social media and the organization of collective action: using Twitter to explore the ecologies of two climate change protests." *The Communication Review* 14:197–215.
- Sherman & Torbert. 2001. Transforming Social Inquiry, Transforming Social Action:

 New paradigms for crossing the theory/practice divide in universities and
 communities. Boston: Kluwer.
- Shirky, Clay. 2008. Here Comes Everybody: The power of organizing without organizations. New York: Penguin Press.
- Shukaitis, Stevphen, David Graeber, and Erika Biddle. 2007. *Constituent Imagination: Militant Investigations//collective Theorization*. AK Press.
- Shukaitis, Stevphen. 2009. "Workers' Inquiry, Militant Research, and The Business School." *Fifth Estate* 44 (1).
- Simon, H. 1971. "Designing Organizations for an Information-Rich World", in Martin Greenberger (ed) *Computers, Communication, and the Public Interest* Baltimore, MD: The Johns Hopkins Press.
- Sinaiko, H. W. 1963. *Teleconferencing: Preliminary Experiments*. Institute for Defense Analyses. http://www.dtic.mil/cgibin/GetTRDoc?Location=U2&doc=GetTRDoc.pdf&AD=AD0601932 Accessed August 27, 2014.
- Smelser, N.1963. Theory of Collective Behavior. New York: Free Press.

- Smith, Bruce L., Harold D. Lasswell, and Ralph D. Casey. 1946. *Propaganda, Communication and Public Opinion*. 1st edition. Princeton University Press.
- Smith, Matthew. 2012. "Living Politically." *Possible-futures.org*. Retrieved January 13, 2012 (http://www.possible-futures.org/2012/01/23/living-politically/).
- Snow, D. A, and R. D Benford. 1988. "Ideology, Frame Resonance, and Participant Mobilization." *International Social Movement Research* 1 (1): 197–217.
- Snow, David A., Robert D. Benford, Holly J. McCammon, Lyndi Hewitt, and Scott Fitzgerald. 2014. "The Emergence, Development, and Future of the Framing Perspective: 25+ Years Since Frame Alignment." *Mobilization*: An International Quarterly 19 (1): 23–46.
- Snow, David, E. Burke Rochford, Steven Worden and Robert Benford. 1986. "Frame Alignment Processes, Micromobilization, and Movement Participation" *American Sociological Review* 51(4):464-481.
- Snow, David. 2004. "Framing processes, ideology, and discursive fields" in SA Soule, H Kriesi (eds.) *The Blackwell Companion to Social Movements* Oxford: Blackwell. Pp. 380–412.
- Sowell, Thomas. 2005. *Affirmative Action Around the World: An Empirical Study*. Yale University Press.
- Spitz, David, and Starling D. Hunter. 2005. "Contested Codes: The Social Construction of Napster." *The Information Society* 21 (3): 169–80.
- Spokane Daily Chronicle. 1955. "Party Line Tragedy Death Blamed on Phone Hogs," November 22. *Google News Archive*. https://news.google.com/newspapers?nid=1338&dat=19551122&id=siBYAA AAIBAJ&sjid=sPYDAAAAIBAJ&pg=7169,3837852&hl=en.
- Staggenborg, Suzanne. 1994. *The Pro-choice Movement: Organization and Activism in the Abortion Conflict*. Oxford University Press.
- Star, Susan Leigh, and Karen Ruhleder. 1994. "Steps Towards an Ecology of Infrastructure: Complex Problems in Design and Access for Large-Scale Collaborative Systems." In *Proceedings of the 1994 ACM Conference on Computer Supported Cooperative Work*, 253–64. CSCW '94. New York, NY, USA: ACM.
- Star, Susan L., and Karen Ruhleder. 1996. "Steps Toward An Ecology of Infrastructure: Design and Access for Large Information Spaces." *Information Systems*. Research 7(1):111–134.

- Star, Susan Leigh, and Anselm Strauss. 1999. "Layers of Silence, Arenas of Voice: The Ecology of Visible and Invisible Work." *Computer Supported Cooperative Work* (CSCW) 8 (1-2): 9–30.
- Star, S. 1983. "Simplification in Scientific Work: An Example from Neuroscience Research." *Social Studies of Science* 13:205-228
- Star, Susan Leigh. 1986. "Triangulating Clinical and Basic Research: British Localizationists, 1870–1906." *History of Science* XXIV: 29–48.
- Star, Susan Leigh. 1999. "The Ethnography of Infrastructure." American Behavioral Scientist 43 (3): 377–91.
- Strauss A. 1987. *Qualitative Analysis for Social Scientists*. New York: Cambridge Univ. Press
- Suchman, Lucy. 2011. "Practice and Its Overflows: Reflections on Order and Mess." *Tecnoscienza: Italian Journal of Science & Technology Studies* 2 (1): 21–30.
- Tarrow, S. 1992. "Mentalities, political cultures, and collective action frames: Constructing meanings through action." In Aldon D. Morris and Carol McClurg Mueller, (eds.) *Frontiers in Social Movement Theory*. New Haven: Yale University Press. Pp.174-202
- Tarrow, S. 1993. "Cycles of Collective Action: Between Moments of Madness and the Repertoire of Contention" *Social Science History* (17)2:281-307.
- Tarrow, S. 1994. *Power in movement: Social movements, collective action and politics.* London: Cambridge University Press.
- Taylor, Verta. 1989. "Social Movement Continuity: The Women's Movement in Abeyance." *American Sociological Review* 54 (5): 761–75.
- Terranova, Tiziana. and Donovan, Joan. 2013. "Occupy Social Networks: The Paradoxes of using Corporate Social Media in Networked Movements." In Geert Lovink and Miriam Rasch (eds.) *Unlike Us.* Amsterdam: Institute of Network Cultures.
- Theocharis, Y. 2012. "The wealth of (Occupation) networks? Communication patterns and information distribution in a twitter protest network." *Journal of Information Technology and Politics* 10:35-56.
- Theocharis, Yannis, Lowe, Will, van Deth, Jan & Garcia-Albacete,
 Gema.2013. "Using Twitter to Mobilise Protest Action: Transnational Online
 Mobilisation Patterns and Action Repertoires in the Occupy Wall Street,
 Indignados and Aganaktismenoi movements." *CPR Joint Sessions of*

- Workshops Johannes Gutenberg Universität, March 2013. http://dl.conjugateprior.org/preprints/ecprjs-theocharis-et-al.pdf
- Thorson, Kjerstin, Kevin Driscoll, Brian Ekdale, Stephanie Edgerly, Liana Gamber Thompson, Andrew Schrock, Lana Swartz, Emily K. Vraga, and Chris Wells. "Youtube, Twitter and the Occupy Movement: Connecting content and circulation practices." *Information, Communication & Society* 16(3): 421-451.
- Tilly C. 1986. *The Contentious French: Four Centuries of Popular Struggle*. Cambridge, MA: Harvard University Press.
- Tilly C. 1978. From Mobilization to Revolution. Reading, MA: Addison-Wesley.
- Tilly C. 1995. *Popular Contention in Great Britain 1758–1834*. Cambridge, MA, and London: Harvard Univ. Press.
- Timmermans, Stefan, and Steven Epstein. 2010. "A World of Standards but Not a Standard World: Toward a Sociology of Standards and Standardization." *Annual Review of Sociology* 36 (1): 69–89.
- Tocqueville, A. 2003. Democracy in America. New York: Penguin Publishers.
- Toret, Javier, and Nicolás Sguiglia. 2006. "Cartography and War Machines: Challenges and Experiences Around Militant Research in Southern Europe." Translated by María-Isabel Casas-Cortés and Sebastián Cobarrubias, in *Transform-Transversaal Web Journal* April. http://ccra.mitotedigital.org/sites/default/files/content/toret_cartography_and_war_machines.pdf.
- Touraine, Alain. 1971a. *The May Movement, Revolt and Reform: May 1968--the Student Rebellion and Workers' Strikes--the Birth of a Social Movement*. New York: Irvington Publishers.
- Touraine, A. 1971b. *The Post-Industrial Society. Tomorrow's Social History: Classes, Conflicts and Culture in the Programmed Society.* New York: Random House.
- Touraine, A. 1981. *The Voice and the Eye: An Analysis of Social Movements*. Cambridge: Cambridge University Press.
- Turkle S. 1995. *Life on the Screen: Identity in the Age of the Internet*. New York: Simon and Schuster.
- Turner, R. N., and L. Killian. 1972. *Collective Behavior*. 2d ed. Englewood Cliffs, N.J.: Prentice-Hall.

- Turner, Fred. 2006. "Where the Counterculture Met The New Economy: The WELL and the Origins of Virtual Community." *Technology and Culture* 46 (3): 485-512.
- Turner, Fred. 2009. "Burning Man at Google: A Cultural Infrastructure for New Media Production." *New Media & Society* 11 (1&2): 73–94.
- Urry, John. 2005. "The Complexity Turn." Theory Culture and Society 22 (5): 1.
- Van Laer, J., & Van Aelst, P. (2010). Internet and social movement action repertoires: Opportunities and limitations. Information, Communication & Society, 13(8), 1146-1171.
- Voss, Kim and Rachel Sherman. 2000. "Breaking the Iron Law of Oligarchy: Union Revitalization in the American Labor Movement." *American Journal of Sociology* 106 (2): 303–49.
- Walmsley, Mark Joseph. 2014. "Tell It Like It Isn't: SNCC and the Media, 1960–1965." *Journal of American Studies* 48 (01): 291–308.
- Wark, McKenzie. 2014. "How to Occupy an Abstraction." *Versobooks.com.*. http://www.versobooks.com/blogs/728-mckenzie-wark-on-occupy-wall-street-how-to-occupy-an-abstraction. Accessed November 1, 2015
- Washington Afro-American. 1956. "There'll Be No Color Line on the Telephone Party Line in Miss," May 1. *Google News Archive*. https://news.google.com/newspapers?nid=2238&dat=19560501&id=h_UlAA AAIBAJ&sjid=qfQFAAAAIBAJ&pg=820,5514413&hl=en.
- Weber, Max. 1958. *From Max Weber: Essays in Sociology*. Edited by H. H. Gerth and C. Wright Mills. New York: Oxford University Press.
- Welsh, Ian. 2001. "Anti Nuclear Movements: Failed Projects or Heralds of a Direct Action Milieu?" *Sociological Research Online* 6(2).
- Wendt, Ronald F. 1996. "Answers to the Gaze: A Genealogical Poaching of Resistances." *Quarterly Journal of Speech* 82 (3): 251–73.
- Wessels, Bridgette. 2010. *Understanding the Internet: A Socio-Cultural Perspective*. Palgrave Macmillan.
- Wiener, Norbert. 1988. *The Human Use Of Human Beings: Cybernetics And Society*. New York, N.Y: Da Capo Press.
- Wilson, J. 1961. "The strategy of protest: problems of Negro civil action." *Journal of Conflict Resolution* 5:291-303.

- Wilson-Grau, Ricardo, and Martha Nuñez. 2007. "Evaluating international social-change networks: a conceptual framework for a participatory approach." *Development in Practice* 17(2):258-271.
- Winner, Langdon. 1980. "Do Artifacts Have Politics?" Daedalus 109 (1): 121–36.
- Zald, Mayer N. and Roberta Ash. 1996. "Social Movement Organizations: Growth, Decay and Change." *Social Forces* 44:327-341.
- Zald, Mayer N. and McCarthy, John D. 2002. "The Resource Mobilization Research Program: Progress, challenge, and transformation." in Berger, Joseph, and Morris Zelditch Jr. (eds.) *New Directions in Contemporary Sociological Theory*. Rowman & Littlefield Publishers.