The Politics of Community Media in the Post-Disaster City

By

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Submitted to the Department of Urban Studies and Planning
in partial fulfillment of the requirements for the degree of

Doctor of Philosophy in Urban Sociology and Planning

at the

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

February 2018

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Abstract

Disasters are times of information deficits and mass media misrepresentations. While mainstream media reports an array of narratives about crisis situations, it often ignores a variety of perspectives and the lived experiences of minority populations. This creates a biased knowledge base for city planners and the general public about the events before, during, immediately following, and long after the disaster. Accordingly, such events can trigger new forms of community media to amplify marginalized voices in the city. As information communication technologies (ICTs) become more accessible, it is easier for people to produce and disseminate community media, which manifests in varied forms with diverse purposes. This dissertation seeks to understand how and why people use ICTs to create community media in the aftermath of a disaster during recovery and rebuilding, as well as identify the multi-scalar gains of these activities.

Using extensive qualitative interview data and thick description, this dissertation creates a framework and comprehensively analyzes the evolution of over forty initiatives such as low-powered FM radio, neighborhood Wifi mesh networks, the innovative use of social networking sites, blogs, and participatory documentaries, among others, that emerged in post-Katrina New Orleans (2005) and in post-Sandy New York City (2012). Applying grounded theory and emergent coding from these examples, it presents a timeless Post-Disaster Community Media Typology that outlines the primary action(s) and progression of these digital activities including: to inform (resource-sharing), to investigate (bottom-up journalism), to incite (organize for place), to include (crowd-sourced deliberation), to interact (therapeutic networking), to interpret (memorialize), and to income-generate (economic self-determination). Two in-depth ethnographic case studies with youth of color in both cities further verify the typology and illustrate how the community media production process can be an emancipatory form of rebuilding.

By investigating the media ecology of grassroots communication, news generation, and storytelling in the post-disaster context, this research challenges the ongoing debate about how ICTs change the concept of community since few researchers have explored this question when physical space is destroyed due to disaster. Media production and communication using various digital tools allows dispersed racial/ethnic communities to maintain bonds, facilitates the creation of new values-based or goal-oriented communities, and provides a way for members of a neighborhood to rebuild their physical communities from afar. Ultimately, this dissertation argues that there are three types of gains at the individual, community, and city level from post-disaster community media: recognition, instrumental
capacity, and asset creation, which are essential for a healthy democracy and equitable resilience to shock.

The findings also have implications for a broader understanding of public participation in the digital age. The typology offers a framework to conceptualize how community development efforts make use of a variety of new media technologies and how to best characterize the impacts of such engagement. The outcomes of planning are evaluated through the ideals of procedural or distributive justice, but neither of these perspectives critically examine how individuals form and obtain knowledge to make sense of their environments in the first place. City planning practitioners and scholars must include access to communication and media production as an issue area in the field to effectively address inequality.

Dissertation Supervisor: Lawrence Vale
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Acknowledgements

My dissertation would not have been possible without the generosity, support, enthusiasm, and wisdom of my professors, colleagues, the wonderful people I met in the field, as well as my friends and family.

First, I am so grateful to my amazing dissertation committee: Lawrence Vale, Jennifer Light, Philip Thompson, and Sasha Costanza-Chock. Thank you all for guiding me through this research journey, for your encouragement and patience, for always making time to brainstorm and troubleshoot with me, and for teaching me how to be a scholar. I am thankful to my dissertation chair, Larry, whose work I have admired since I was an undergraduate student. I am so fortunate to have been his student twice for both the MCP and PhD program. Larry was always open to my ideas and helped me creatively compare phenomena that seemed unrelated. He taught me how to tell meaningful stories, to question definitions, and create my own theories. His detailed comments on all my written work and chapters has shaped my thinking about the role of new media tools in cities. Not only did Larry teach me how to be a researcher, but also how to be a mentor. I am thankful to Jen for her warmth and enthusiasm, for always reminding me to situate my project in theory, and for teaching me how to develop important research questions from theory. I am thankful to Phil for pushing me to think bigger and better, and for asking difficult and critical questions about democracy and inequality. I am thankful to Sasha for leading by example, and for showing me what it means to be an activist scholar, for inspiring me to incorporate participatory action research into my methodologies, and for helping me get up to speed on civic media/media justice scholarship.

Along with my committee, many faculty members have guided me through the doctoral program. I cannot thank Justin Steil more than enough. Even though he was not an official member of my committee, he still made time to provide valuable feedback on my dissertation throughout various stages of the process. He gave me so many enriching opportunities as a student from teaching urban sociology at MCI Norfolk to visiting FEMA JFOs. I am grateful to Ceasar McDowell for his advice and ideas on my project from inception to completion. His frameworks have influenced how I see the world. Thank you to Karl Seidman who first introduced me to the magic of New Orleans as an MCP student, and who connected me to important people in the field. I was your student when I lay the foundations for this work. Many former and current faculty members at DUSP have influenced my thinking about research methods, social justice, the field of planning, and media and cities including Xavier de Souza Briggs, Annette Kim, JoAnne Carmin, Amy Glasmeier, Tunney Lee, Anne Spirn, and Larry Susskind.

This project and my entire PhD would also not be possible without the brilliant and wonderful Dayna Cunningham, executive director of the Community Innovators Lab. A huge thank you to Dayna for presenting me with the SAGE/Marilyn Jacobs Gittell Activist PhD Fellowship. Dayna’s teachings and philosophies have profoundly influenced my own intellectual identity. Thank you for enlightening me about “the right to research” and participatory action research and for connecting me to the URBAN network. Dayna has always supported my work whether I was photographing abandoned street chairs or learning about local wifi networks in Red Hook, Brooklyn.

I would also like to extend my thanks to the excellent staff at DUSP: Sandy Wellford, Ellen Rushman, Karen Yegian, Sandra Elliott, Janine Marchese, and Duncan Kincaid. Thank you for always answering my questions and for running the department so smoothly.
This research would not have been possible without funding from the Harold Horowitz Student Research Fund, the MIT Priscilla King Gray Public Service Center (thank you Alison Hynd and Kate Trimble), the New York Public Library Research Fellowship, and the New Orleans Center for the Gulf South Research Fellowship.

There were so many individuals in the field that also helped and supported me along the way. I deeply appreciate all the people who made time for interviews and shared their stories with me. In New Orleans, I am especially grateful to Luisa Dantas of Land of Opportunity and Darcy McKinnon of NOVAC and the members of 2-Cent Entertainment LLC (particularly Brandan Odums, Kevin Griffin, and Amanda B.). To members of 2-Cent Entertainment: you all are truly amazing and I will always remember to give my two cents even if my voice shakes. Preet Sarma and Jackie Dadakis made New Orleans feel like home, and Lauren Zanolli was an excellent co-working partner. The brilliant Anna Brand helped show me the way and provided endless amounts of support as a friend, colleague, and professor.

In New Orleans, Tony Schloss and Anna Ortega-Williams of the Red Hook Initiative were my heroes. Thank you for welcoming me into your community and for trusting me. I learned so much from both of you and your work inspires me every day. Jaebi Bussey and Alex Coles were the most awesome colleagues and always made me feel welcome at Ferris. Also, the members of Resilient Communities NYC were tremendously helpful: thank you Greta Byrum for being so enthusiastic about my project, and to Teresa Basilio Gaztambide, Raul Enriquez, Katherine Ortiz, and Houman Saberi for sharing your knowledge with me. I feel incredibly lucky to have worked alongside the most “lit and woke” group of Digital Stewards: Joseph Alston, Royale Bastien, Jazzhane Cherry, Jacob Gibbs, Eliazar Rivera, Savon Sims, Denzel Walker, and Javon Webb. Thank you for sharing Red Hook with me and for keeping me grounded. The best of part of this dissertation was hanging out with you all in your neighborhood and watching Jazzhane, Joe, and Javon present their research and represent Red Hook at MIT. This dissertation is for you all.

I made the most kind and lovely friends at MIT. I really could not have done it without you all: Laura Delgado, Melissa Chinchilla, John Arroyo, Ella Kim, Faizan Jawed, Nick Kelly (and Truman), Yasmin Zaepoor, Devanne Brookins, Haegi Kwon, Lou Thomas, Lily Pollans, Lili Knorr, Eric Chu, Tony Vanky, and Mitchell Cook. Thanks for your support and camaraderie, your insights and thoughtful conversations, as well as for all the laughs and keeping the PhD process fun.

A huge thank you to my far away (and not so faraway) friends for cheering me on through the whole doctoral program: Nikita Barai, Rebecca Liu, Melissa Jalali, Rebecca Weinberg, Rebecca Sherman, Scott Kleiman, Celia Gomez, Naveen Jawaid, Lakshmi Sridaran, Alexa Mills, Marianna Leavy-Sperounis, and Daniel Daou. Thank you to the best roommates a girl could ask for: Ankita Deshpande and Sundus Hussain. I appreciate how you tolerated my crazy schedule and my variety of subletters to make field work possible. Coming home to you two after late nights of writing was often the highlight of my day. And of course, thanks to my soul sister cousins: Geetika Sripathi and Kriti Vichare.

Lastly, thank you to my loving and caring family. Mom, Dad, and Aseem – you all are simply the best. I miss you, Nana. You paved the way for all of us and I hope this dissertation makes you proud. And Mom, I got my PhD because I want to be like you when I grow up.
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PART I
Chapter 1
Introduction

The spaces in which civic discourse occurs are also the spaces in which knowledge is produced and disseminated. The root of civic discourse is the media (Castells, 2004). Yet, the media may also perpetuate inequality through biased reporting, and the lack of representation or misrepresentations (Dixon, 2017; Cook, 2015; Kahle, Yu, and Whiteside, 2007). Cognitive linkages between social groups and social roles are reinforced through media consumption (Dixon, 2017). Even though the media may be free from government control in the United States, a free media market still does not serve all the interests of society. This is because owners of mass media have the power to control content, and often only choose material that will increase revenues even if it is inaccurate or harmful (McChesney, 2013). The dependence on advertising revenue usually means catering the media for affluent people. There is also an assumption that market for media products is highly competitive with few barriers to entry. However, if this were true, people from all socioeconomic classes would create media organizations (Keane, 2009).

Disasters are situations that especially highlight these issues. For example, mass media reporting of disasters often promote messages and ideas that have been proven false in empirical research on these crises (Kahle, Yu, and Whiteside, 2007; Tierney, Bevc, and Kuligowski, 2006). The most infamous examples of this in the United States are from the aftermath of Hurricane Katrina when print and online newspapers, television, and radio publicized stories about violence. Criminalizing African-Americans and black bodies in particular, CNN announced that bands of rapists were going block to block in New Orleans; the September 2nd, 2005 main headline of the Times Picayune read “After the Disaster, Chaos and Lawlessness Rule the Streets”; a Fox News anchor recounted “thugs shooting at rescue crews”; The Washington Post ran a story titled “A City of Despair and Lawlessness” about looters and carjackers running rampant; and several media outlets spread rumors about murders in the Superdome that served as a shelter to approximately 20,000 people in the days after Katrina (Flaherty, 2010; Solnit, 2009; Kahle et al, 2007). As seen in the infamous photos of Image 1.1 below: white people “find” food whereas black people “loot” grocery stores. A Getty Images photographer shot and provided a description for the first photo and an Associated French

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1 The term “Hurricane Katrina” is inaccurate and several people even find it offensive because it does not emphasize how flooding in the city was actually a manmade disaster. In his New Yorker article “Don’t Call it Katrina”, Thomas Beller provides the various explanations as to why these semantics are important drawing from Sandy Rosenthal’s levees.org (discussed in chapter 3) and Richard Campanella’s essay “Katrina Lexicon.” Scholar Nicole R. Fleetwood refers to the disaster as “The Katrina Event”, which “refers to the material and social impact of the storm, as well as the complex set of social, technological, and economic narratives and processes reported by the news media through governmental reports” (Fleetwood, 2006, p. 786). This definition aligns with my own analyses. Nonetheless, during my interviews in New Orleans, respondents still referred to the disaster as Hurricane Katrina so for the sake of clarity, I still use this term throughout the dissertation, and also refer to the event as just “Katrina.”
Press (AFP) photographer captured and briefly described the second photo (Ralli, 2005). Both photojournalists wrote the descriptions based on their own visual assumptions (Ralli, 2005). The Yahoo News service distributed the images and captions across the Internet, presenting a biased and racist narrative of survival activities. Reporter Jonah Goldberg of The Los Angeles Times states: “But there was one thing missing from the coverage of this natural, social, economic, and political disaster: the fact that Katrina represented an unmitigated media disaster as well.”

This is not to say that high quality journalism did not also exist about the storm’s aftermath, but news outlets were responsible for spreading false rumors. Many of these myths were debunked several months later by some of the same media outlets that reported them. Regardless, these images were already imprinted into the public’s consciousness despite the retractions. Such grossly inaccurate depictions are harmful because of their power in influencing organizations, governmental, and public responses to disaster (Tierney et al, 2006; Fischer, 1998). Tierney, Bevc, and Kuligowski (2006) argue that the media’s focus on lawlessness in post-Katrina New Orleans reinforced the political ideology of militarism and the need for the military in disaster management to control civil unrest and disorder, especially in low-income communities of color. These prejudiced, invalid assumptions led to the unnecessary allocation of public safety resources, which should have gone toward direct assistance for disaster victims (Tierney et al, 2006). Similarly, other communications scholars contend that media events such as Katrina are “constructions made by organizations to create, maintain, or legitimize hegemonic relations and reinforce dominant power structures” (Jiminez-Martinez, 2014, p. 1809).

Yet, stories from survivors and relief workers on the ground paint a completely different picture of cooperation, harmony, and reciprocity. In her book, A Paradise Built in Hell: The Extraordinary Communities that Arise in Disaster, author Rebecca Solnit provides accounts of unlikely groups of people coming together to help one another in post-Katrina New Orleans. She writes:

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Image 1.1 Yahoo News Images & Captions from August 30, 2005

Two residents wade through chest-deep water after finding bread and soda from a local grocery store after Hurricane Katrina came through the area in New Orleans, Louisiana.

(AFP/Getty Images/Chris Graythen)

A young man walks through chest-deep flood water after looting a grocery store in New Orleans on Tuesday, Aug. 30, 2005. Flood waters continue to rise in New Orleans after Hurricane Katrina did extensive damage when it hit.

These stories and pictures both appeared in Yahoo! News August 30, 2005

http://news.yahoo.com/photos/508033/480/2aade09cd16301590
The volunteers are evidence that it doesn’t take firsthand experience of a disaster to unleash altruism, mutual aid, and the ability to improvise a response. Many of them were part of subcultures, whether conservative churches or counterculture communities, that exist as something of a latent disaster community already present throughout the United States and elsewhere (Solnit, 2009, p. 302).

As residents returned to the primarily African-American Lower-Ninth Ward neighborhood, organizations such as the Holy Cross Neighborhood Association (HCNA) met weekly to recruit and coordinate various New Orleanians, outside groups, and funders for rebuilding assistance (Seidman, 2013). These volunteers were comprised of churchgoers, graduate students, young anarchists, and members of the Sierra Club. While this assortment of individuals did not normally come into contact with one another, they complemented each other’s efforts aside from their clashing political leanings or beliefs (Solnit, 2009). In the Mid-City neighborhood near the bayou, several residents owned boats and used their vehicles to deliver supplies to the elderly, transport strangers across the floods, and even arrange ad-hoc rescue missions (Flaherty, 2009).

Another instance of teamwork occurred regularly at the supposedly dangerous Superdome. Military helicopters would fly over the Superdome, and drop hundreds of boxes of food and bottles of water all over the concrete sidewalks. Survivors did not aggressively steal or loot these goods. Rather, helpful civilians found shopping carts to wheel the sustenance inside for fair distribution. However, these stories did not make the mass media headlines (Flaherty, 2009). Previous psychological and sociological research about group dynamics during crisis corroborate these anecdotes. Findings indicate that conflicts within communities are often forgotten in times of crisis and instead people collaborate under extreme stress (Fritz, 1961; Barton, 1969; Dynes, 1970; Drabek, 1986). After disasters, individuals who may not know one another well (or at all), are open to helping each other (Patterson, Weil, and Patel, 2009).

In their final report, “A Failure Initiative,” the U.S. House of Representatives Select Bipartisan Committee to Investigate the Preparation for and Response to Hurricane Katrina declare that the crisis resulted as a failure of those living in affected areas to access accurate information prior to the storm and after flooding. The document even contends, “The media must share some of the blame here...its clear, accurate reporting was among Katrina’s many victims. If anyone rioted, it was the media” (A Failure Initiative, 2006, p. 360). Along with criticizing the media, the Committee’s report also frames the crisis as a failure of individuals to access necessary knowledge through the proper use of information communications technologies (ICTs) (Fleetwood, 2006, p. 767).

Scholar Nicole Fleetwood (2006) asserts that the Committee’s declarations about the need for people and organizations to embrace the digital age perpetuates the idea of technological determinism or technology’s ability to solve social problems, lessening governmental accountability. Most importantly, with regard to the technological mediation of narratives, she states, “Technology here should be understood as a media process of production and as a discursive tool by which particular narratives are naturalized and certain bodies made vulnerable. In this context, Hurricane
Katrina reveals a different kind of determinism – the stark operations of technology in determining who lives and who dies” (Fleetwood, 2007, p.768).

I present these contradictions in post-Katrina disaster reporting and sociological research, as well the Committee’s views on media, knowledge, and information communication technologies along with Fleetwood’s response because these various points speak to the subject of this dissertation. Given that disasters are times of information deficits and rumors, such events can trigger new forms of community media to amplify marginalized voices in the city. While the Committee’s report suggests that New Orleanians and others affected by Katrina were not using ICTs in meaningful ways before and after the storm, this research points to various innovative, grassroots uses of technology for information sharing, the control of self-representation, community-building, and memorialization.

Essentially, this project aims to understand how people use ICTs to: 1) intervene in post-disaster news, combat inaccuracies, and disseminate local knowledge as well as 2) facilitate the post-disaster cooperation and mutual aid as previously described. Also, rather than just exploring media as information delivery, I investigate the media production process, which shapes the content and has the potential to influence social relationships and collective action. I consider how new media tools are a pathway for city residents to influence community and economic development in their neighborhoods, either through meaningful public participation with local officials or through activism by organizing amongst themselves. Who has access to these digital tools and whose voice actually matters? I investigate how individuals and groups partake in civic discourse and amplify their voices using digital tools. Since there is a difference between being heard versus having your words acted upon, how do we understand the impacts of civic discourse in the digital era?²

Given that information communication technologies (ICTs) have transformed over the last thirty years – including the invention and commercialization of the Internet, the creation of interactive social media, the rapid spread of mobile phones, digital imaging and instant audio making – it has also become easier for individuals and groups to intervene in discourse by creating “civic media” or “community media” (Allen and Light, 2015).³ *Civic media* is the practice of designing, building, implementing or using digital tools to intervene or participate in the public sphere, and the umbrella term encompasses mediated activities initiated by those in power and by non-state actors (Gordon and Mihailidis, 2015; Jenkins, 2011). Civic media does not embrace a particular technology or domain such as government or social movements, but rather refers to the “intentionality of achieving the common good” (Gordon and Mihailidis, 2015). But then the question arises – who

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² Allen and Light (2015) offer a framework for answering this question through the concepts of voice, public spheres, and civic agency. Voice refers to acts of self-expression, paying particular attention to marginalized individuals and groups. Public spheres describe the process by which “voice” turns to influence. Civic agency recognizes the various ways in which digital spaces and tools strengthen and weaken democratic practice.

³ Henry Jenkins coined the term “civic media” at MIT in 2007 when the School of Architecture and Planning (SAP) and the School of Humanities and Social Sciences (SHASS) launched the Center for Future Civic Media (now simply known as the Center for Civic Media).
defines “public good?” According to Henry Jenkins (2011), “[Civic media] is any use of any technology for the purposes of increasing civic engagement and public participation, enabling the exchange of meaningful information, fostering social connectivity, constructing critical perspectives, insuring transparency and accountability, or strengthening civic agency. Community media is a form of civic media: it is independent from the state and the market, emphasizing the grassroots nature of production (Keane, 1998; Carpentier, Lie, and Servaes, 2003). I will define community media in more detail later in this chapter.

This chapter presents the various literatures I am weaving together to frame and anchor this study. First, I explain why it is important for city planning scholars and practitioners to better understand digital community media. While the use of ICTs to facilitate participation have been incorporated into scholarship and practice, very little research explores how those same digital tools influence media production and accordingly knowledge production as a proxy for or pathway to participation. I provide a brief history of the term community media to clarify the overall object of study drawing from literatures about communication in the public sphere. Next, I summarize two theoretical debates that inform my research questions including the influence of technology on the concept of community from the perspectives of urban and media ecology, as well as the understanding of resilience with regard to ICTs. Finally, I present the research questions and a brief research design, along with the chapter outline for this dissertation.

Why is it Important to Understand Digital Community Media in the Field of Planning?

Planning scholars address justice in the city by either focusing on access to goods\(^4\) in a distributive and material sense or by focusing on the inclusivity and communicative practice of decision-making processes (Innes and Booher, 2014; Fainstein, 2010; Mattila, 2002). Yet, planning scholars do not critically analyze news and media coverage nor do they emphasize the importance of communication infrastructure and information access (Byrum, 2012), which forms the basis of what people know and accordingly how they act in the city, especially in the digital era (Castells, 2009). I argue that to work towards a just city, planners need to also adopt a communications rights and media justice framework, which prioritizes a “politics of recognition” or a “politics of difference.” (Fraser, 1996; Young, 1990; Themba-Nixon and Nan Rubin, 2003).\(^5\) Media justice emphasizes not only having the right and access to information, communication, and news production, but also the capacity to engage in such activities, and advocates for fairness in who profits from it all (Themba-Nixon and Nan Rubin, 2003). This is important because a lack of recognitional justice prevents both distributive and procedural justice (Fraser, 1996).

\(^4\) By goods, I am referring to housing, transportation, education, and employment, etc.

\(^5\) In 2002, Malkia Cyril, the Executive Director of the Center for Media Justice was one of the first people to coin the term, which she found inspiration from through the environmental justice movement, which analyzed harm through race and class.
Additionally, as part of procedural justice, planning scholars and practitioners promote public participation in city planning and policy-making for several reasons. It allows decision-makers to find out what the public’s preferences are so they can use that information in their decision-making (Fearon, 1998; Benhabib, 1996). Local knowledge and varied perspectives enhance problem solving (Briggs, 2008; McDowell, 2005). Participation creates community with social trust, norms of reciprocity, and cooperation. It can build civil society and fosters an adaptive, self-organizing polity capable of addressing difficult problems (Innes and Booher, 2004; Fung and Wright, 2001). It protects interests, while encouraging public-spirited perspective on collective issues, promotes mutually respectful decision-making, and corrects the mistakes of the past (Shapiro, 1999; Polletta and Lee, 2006). Lastly, participation develops the capacities of the individual and has positive psychological benefits (Zapata, 2013; Fiorina, 1999; Day, 1997). Interestingly enough, this dissertation shows that the organic, grassroots process of using ICTS to create community media also has the potential to yield all of these benefits. Yet city planning scholars and practitioners do not account for these activities as a form of public participation.

The ideals of public participation in city planning also has several paradoxes. A fair, legitimate, just, and effective participatory process (Fung, 2006; Young, 2002) does not necessary lead to a fair, legitimate, just, and effective outcome (Fiorina, 1999; Fainstein, 2000; Day, 1997). The groups who suffer most from inequality that reside in the fringes of a political community stand to gain the most from participating and expressing their voice, yet their marginalized status excludes them from contributing to the deliberative process. The cost of participating, cultural barriers, or lack of acknowledgement from governing bodies prevents inclusivity. (Thompson, 2005; Young, 2002; Shapiro, 1999; Fiorina, 1999; Fainstein, 2000). Participatory democracy only lives up to its ideals if it is inclusive, but this desired inclusivity can also lead to competition and polarization among groups, and a decision-making impasse (Merrified, 1997; Susskind, 1987). Often, it is these exact dilemmas that inspire the creation of community media, and thus should be a focus of study for city planning scholars. For example, Jacob Wagner (2010, p. 114) states in his piece “Digital Media and the Politics of Disaster Recovery in New Orleans”:

> In New Orleans, the politics of planning communication are front and center the everyday process of recovery. The digital innovations of citizens provide an important but underappreciated aspect of recovery. Although there has been some attention to digital activism in mainstream journalism, there has been very little critical reflection from the professional planning community on the fact that digital media have provided a basic infrastructure for citizen-based action that has helped to improve the official efforts of municipal, state, and federal governments.

Media justice is inherently related to theories of communicative planning, which emphasizes “the intersubjective formation of consciousness” (Healy, 2012, p. 337). It is through talk, conversation, storytelling, and news that people are able to make sense of the world around them
Theories of communicative planning “center on the importance of attention to the social micro dynamics of practices in all their performative dimensions. It is through such micro-dynamics that planning ideas and strategies are accomplished” (Healy, 2012, p. 333), and the planner’s primary function is to listen to people’s stories and assist in forging consensus among differing viewpoints (Fainstein, 2000). While scientific or technical information has its place, local knowledge and personal experiences are privileged (Corburn, 2003; Innes, 2007). Usually, communicative planning practice is studied in the context of community meetings and other in-person deliberative forums or through the daily interpersonal interactions of a planner. However, communicative planning theory does not comprehensively address the effects of digital discourse on planners and constituents in its propositions.

This dissertation focuses on a crucial aspect injustice that characterizes U.S. cities: unequal access to information and the production of knowledge through digital media. In his book, Media and Morality: On the Rise of Mediapolis Roger Silverstone (2007) claims that state-regulated communication rights are inadequate to ensure access to and involvement by all individuals in the media, especially those from historically marginalized groups. There are many interrelated factors that may hamper individuals’ and groups’ abilities to hear and/or speak via digital media including poverty, racism, and social isolation (Gangadharan, 2014). The lack of sufficient communication infrastructure and disparities in people’s ICT-use abilities contribute to social inequality and prevents access to mediated civic discourse in various areas (Hargittai, 2008; Byrum, 2012). “There is an anomaly in our constitutional law. While we protect expression once it has come to the fore, our law is indifferent to creating opportunities for expression” (Barron, 1976, p. 1641).

Thus, Silverstone (2007) maintains that “only through a widespread cultural shift – from the media consumer, to the media maker, and again to the media owner – can a system of communication rights successfully facilitate the recognition of cultural difference” (Gangadharan, 2014, p. 206). For planners, media justice is then not only about providing the provisions for communication, civic discourse, and media production, but also envisioning different structures of control among the market, the state, and civil society (Gangadharan, 2014).

What is Community Media?

To define community media, it is necessary to explore the concept of community, which is nebulous and continuously evolves due to political, economic, and technological change (Chaskin, 1997). It can refer to relationships within a geographic area or social networks unrelated to physical space (Wellman, 1979; Sampson, 2008).

David Harvey (1985) explains in the Urbanization of Capital, how neoliberal policies and the capitalist welfare state have actually led to and maintained ideas of “community” symbolically. John Downing (2000) makes this same argument in his book Radical Media. They assert that because of urban riots in the 1960’s and 1970’s, which were products of the capitalist welfare state (and also
racism), planners aimed to “gild the ghetto” which is “a well-tried tactic in the straddle to control civil strife in urban areas” (Harvey, 1989, p.179). Harvey and Downing see “the principle of community as the main bulwark of defense against this revolutionary tide – a principle that sought to establish harmony between the classes around the basic institution of community. From Chalmers through Octavia Hill and Jane Addams, to Model Cities and citizen participation, we have a continuous thread of an argument, which suggests that social stability can be restored in periods of social unrest by an active pursuit of the principle of community” (Harvey, 1989, p. 179-180).

Community media has more individual agency woven into it than this though. I turn to Clemencia Rodriguez’s (2011) book citizens’ Media against Armed Conflict in which she examines how civilians use media and ICTs to survive conflict and war in Colombia. She writes (2011, p. 3):

As tools explicitly designed to craft symbolic products and processes, media and ICTs occupy a privileged position in helping communities reconstitute symbolic universes that have been disrupted by violence. Through production of their own radio, video, television programming, civilian communities can begin reconstituting webs of meaning, allowing them to make sense of their experience of war.

She argues that citizens’ media versus media as government watchdog or news supplier is able to effectively fight the negative impacts of violence such as pervasive fear, mistrust, and anomie. It does so by creating a space for people to come together not as rivals or strangers, but as neighbors to reclaim their community and collective voice.

Historically (before Web 2.0), academics and practitioners have always defined community media in opposition to mainstream media (Rennie, 2006). Scholar Kevin Howley (2005, p. 2) defines community media as:

...grassroots or locally oriented media access initiatives predicated on a profound sense of dissatisfaction with mainstream media form and content, dedicated to the principles of free expression and participatory democracy, and committed to enhancing community relations and promoting community solidarity.

The differences between the two types are characterized by variation in form, which focuses on financial, structural, and technological processes of production and distribution, as well as content, which focuses on information, perspective, and message. (Rauch, 2015). Community media forms tend to include nonprofits or noncommercial structures; collective ownership or decision-making; de-professionalized roles or citizen producers; and often free distribution without a subscription. Community media content tends to critique mainstream media; report on oppositional culture; cover neglected stories; feature marginalized voices; and provide information to mobilize readers (Rauch, 2015).
The horizontal and vertical consolidation of media markets may limit participation in media production and the political lobbying power of media corporations benefits these companies financially at the expense of democracy (Herman & Chomsky, 2002). In this way, mainstream media undermines the ideals of participatory democracy by limiting access to information and participation in public discourse, a central tenet of planning in contemporary Western liberal democracies (Sandercock and Attili, 2010).

Community media, however, democratizes the structure and conversational practices of modern communication systems and in doing so, supports participation in public discourse. “This power resides both in its ability to uncover and persuasively portray countervailing stories that challenge dominant discourses and in its ever-evolving ways of providing communication channels beyond the control of even authoritarian regimes” (Sandercock and Attili, 2010, p. 326). Ultimately, community media can provide a pathway to inclusion and self-determination (Kim and Ball-Rokeach, 2006). This research pushes these definitions of community media and investigates the dynamics of actual practice more deeply: how conscious are community media makers of the fact they are expressing voice and charting memory? Is challenging mainstream media really the main goal of community media or is it more about survival, the preservation and assertion of a collective identity, or something else altogether?

Before the invention of the Internet and social media, mainstream media and community media were two very separate entities (Rodriguez et al, 2014). Mainstream media “existed in a universe of advertisers, target audiences, and a continuous commodification of leisure and information” (Rodriguez et al, 2014: 151). Also before the Web 2.0 era, mainstream journalists adhered to professional reporting norms to maintain credibility and legitimacy within their field. These norms, in turn, established a media elite that operated within rigid hierarchies and prevented citizen participation in the creation of news (Shoemaker and Reese, 1996). Meanwhile, media activists or community media makers appropriated and reinvented information communication technologies (ICTs) in ways not intended by their corporate designers. However, with rapid and contemporary emergence of new and accessible ICTs, alternative uses of media technologies and the creation of community media are not clearly separated from their corporate originators. For example, social movement organizers’ use of platforms such as Facebook, Twitter, and YouTube remain within the corporate frameworks that underpin these platforms, a shift that helps explain why these uses of technology have become prevalent in mainstream media (Rodriguez et al, 2014: 151).

Theorists increasingly consider the category of mainstream media to be porous, and conceive of mainstream and community media as a “continuum” or a “converging spectrum” (Kenix, 2011).

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6 Downing (1984) gives examples of this: 1) in the early 20th century print technologies were appropriated by U.S. anarchist movements as well as revolutionary groups in the U.S. and Russia; 2) in the 1920s Bolivian tin miners were using radio technologies to mobilize their unions in a workers’ struggle; and 3) activists during the civil rights movements in the United States benefited from technological progress and lower prices in the system of reprography to publish their own newspapers.
Mainstream media producers are using communication models that attempt to turn audiences into active participants, which is often associated with community media. Conversely, some community media outlets are borrowing economic models from their mainstream counterparts (Kenix, 2011). Also, new ICTs and crowdsourcing tools allow traditional mainstream media outlets to easily collaborate with community media makers.

Rodriguez et al (2014) present research challenges associated with the blurring relationship between mainstream media and community media. First, mainstream media sound bites such as “the cell phone revolution” or the “Twitter revolution” overlook the historical context of the media itself, and make human agency invisible. Second, all uses of media are framed by the political economies of ICTs, and molded by international trade, corporate greed, and surveillance practices on the parts of both financial and political powers (Costanza-Chock, 2008). Older ICTs such as radio and print media fare better in their degree of independence from their corporate originators. For example, when the video portapak was launched in the 1960s, activists in the United States saw the video camcorder as “a tool, a weapon, and a witness”, and its proprietor was not benefitting from or controlling these uses (Boyle, 1992). Audio-cassettes, fax machines, battery operated radios allow for more autonomy from corporate interests and state surveillance than Facebook, YouTube, or Twitter (Rodriguez et al, 2014). Third, researchers often simplify the purposes of new ICTs to information dissemination among networks of individuals when in fact, community media makers may have much more complex goals or trigger complicated communication practices.

While mainstream outlets may initiate civic media, community media is always a grassroots endeavor. There may be instances when a grassroots organization with minority interests and a top-down entity with majority interests collaborate to create community media, which represent the shared area in Figure 1.1 among community, civic, and mainstream media. Or a community media program may become formalized with time, and enter the mainstream media space.

Figure 1.1 Media Types

![Figure 1.1 Media Types](image)

While I use the terms community media and civic media throughout this dissertation, I recognize that there is an entire encyclopedia of media types that also describe the phenomenon of interest as demonstrated in Table 1.1. More often than not, community media includes many of these other activities too.
Table 1.1. **Selected Media Definitions**

<table>
<thead>
<tr>
<th>Alternative media</th>
<th>Produced outside mainstream media institutions and networks. Can include the media of protest groups, dissidents, fringe political organizations, even hobbyists (p. 15).</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anarchist media</td>
<td>Demonstrates the ideologies of anarchism – challenges authority and questions legitimacy. Attempts to practice socialist principles in the present, not just imagine them for the future (p. 43).</td>
</tr>
<tr>
<td>Citizen journalism</td>
<td>This phrase became popular in the immediate aftermath of the December 2004 South Asian Tsunami because of the remarkable range of first-person accounts. It is also described as grassroots journalism and relies on lived experience, not professional training to tell a story (p. 97).</td>
</tr>
<tr>
<td>Citizens’ media</td>
<td>Clemencia Rodriquez coined the term in 2001, and it emerged from a movement in the 1980s for Latin American communications and culture scholarship to be conceptualized on its own terms, not imported from the Global North. It is an umbrella term from alternative, radical, marginal, participatory, community, underground, etc. media (p. 98-99).</td>
</tr>
<tr>
<td>Community broadcasting</td>
<td>A Canadian term, which refers to broadcasting that is a “public service essential to the maintenance and enhancement of national identity and cultural sovereignty” to have a media system more responsive to and reflective of the public (p. 105).</td>
</tr>
<tr>
<td>Feminist media</td>
<td>In the 1960s and 1970s, feminists organized around several media concerns, including women’s lack of employment within the industry, sexist and stereotypical depictions of women found within dominant media, the creation of distinctly feminist media education and institutions (p. 196-197).</td>
</tr>
<tr>
<td>Grassroots tech</td>
<td>Groups voluntarily providing alternative communication infrastructure to civil society activists and citizens and operating with collective organizing principles (p. 237).</td>
</tr>
<tr>
<td>Human rights media</td>
<td>Communication activities such as monitoring, protection, promotion, and the enforcing of human rights (p. 227).</td>
</tr>
<tr>
<td>Indigenous media</td>
<td>Created by and for Indigenous groups to control representations of their lives and communities. They are usually associated with movements for Indigenous rights including land and natural resource rights, as well as cultural survival (p. 257).</td>
</tr>
<tr>
<td>Indymedia</td>
<td>The Independent Media Center (IndyMedia) emerged in 1999 during mass demonstrations against the World Trade Organization (WTO)’s neoliberal policies. Because mainstream media was not adequately representing demonstrators and their views, a coalition of media activists started IndyMedia (p. 270).</td>
</tr>
<tr>
<td>Labor media</td>
<td>Usually refers to the publications and news of unions; can help spur labor social movements (p. 298).</td>
</tr>
</tbody>
</table>

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7 These definitions are adapted and summarized from John Downing’s (2011) *Encyclopedia of Social Movement Media*. 
Participatory media | Communication technologies and processes that embody ethical approaches to production and distribution; founded on the ideals of inclusion and social justice (p. 388).
---|---
Radical media | The term was offered as a substitute for alternative media, which John Downing (2001) critiqued as oxymoronic: ‘everything at some point, is alternative to something else.’ Express opposition vertically and build network laterally.
Idiomatic media | Media that tends to be interconnected on a global scale and where organization is fluid, but networks are essential (p. 17).
Tactical media | A form of media activism that values temporary interventions rather than the creation of permanent and alternative media (p. 24-25).
Youth media / youth-generated media | A very varied field directed at the benefit of young people or run by young people as autonomous enterprises (p. 552).

The importance of community media can be understood through Jürgen Habermas’s (1984) notion of the public sphere and Nancy Fraser’s (1990) concept of the subaltern counterpublic. While Habermas argues that there is one unifying public sphere, Fraser asserts that diversity and inequality in society creates several different types of public spheres. According to Habermas, the public sphere is integral to the establishment of civil society and distinct from the operations of the state, the market economy, and the private home. He claims that deliberation in this public sphere molds the identity and interests of citizens in ways that contribute to the societal conception of the common good. His theory of *communicative rationality* (which communication planning draws from) elucidates the mechanisms by which deliberation leads to just processes and outcomes. He argues that deliberation in the public sphere is crucial, if not more important, among unofficial networks of people not connected to the official political realm. Deliberation based on reason, logic, and persuasive argumentation, also known as the “rational critical debate” provides the basis for political discussion, consensus formation, and democratic decision-making (Calhoun, 1992).

Although Habermas privileges face-to-face communication, his historical account of late 18th and 19th century Europe recognizes the crucial role of print media including newspapers, pamphlets, and journals in the emergence of the public sphere. Additionally, in contemporary society (and in crisis situations), this type of large-scale or citywide dialogue is quite unrealistic, and public discourse often occurs within and through print, visual, electronic, and digital media. The public sphere highlights the fundamental relationship between democracy and modern communication systems. A functioning democracy requires an informed and engaged citizenry, and it is the media that must provide the resources – news, information, and opinion – for people to identify matters of common concern and work towards shared goals (Young, 2002; Howley, 2010). The media should then do more than merely inform a public. Rather, to serve the public interest, the media should encourage civic engagement and promote deliberative democracy, not simply by reporting on important issues, but by providing opportunities and resources for citizens to identify and address these issues (Howley, 2010).
Yet, these ideals are laced with several practical problems in a highly mobile and heterogeneous society marked by ethnic, religious, and cultural diversity, partisan politics, and economic stratification (Fraser, 1992). Nancy Fraser (1992) argues that Habermas’ unifying public sphere does not really exist due to these differentiations. There is no one public and the sphere is a mosaic of subaltern counterpublics. Habermas fails to acknowledge the existence of other discursive spaces formed by low-income communities, women, minorities, and other groups prohibited from participating in mainstream dialogue within the public sphere (he has also never proved his claims with an empirical study). This poses a challenge to the idea of a true participatory democracy because “many publics are likely to take the form of contestation rather than deliberation” (Fraser, 1990: 142). In this way, community media serves as a resource for subaltern counterpublics to articulate interests and concerns.

Various studies show that mainstream media often misrepresents or diminishes individuals and groups based on distinctions of class, race, ethnicity, gender, and lifestyle. This was certainly true after Katrina, when mainstream news outlets told a very racialized and prejudiced story of Katrina’s aftermath in which African-American residents were looting the city and engaging in violent crime to survive (Cook, 2015). Unlike the AFP, Getty Images, and Yahoo News, community media provides opportunities for marginalized groups to tell their own stories and in turn participate in civic life (Rodriguez, 2001). It protects and defends minority identities while concurrently defying inaccurate and offensive media representations (Cook, 2015). However, I acknowledge that there is a dark side to community, especially in this Trump-era and that community media also has the potential to exclude. This caveat is discussed in more detail at the end of this dissertation in chapter 6.

Lastly, it has become common for local governments to design top-down technology platforms to foster participation, but these efforts may not engage disenfranchised populations who are not familiar with such technologies. Constituents may also feel ignored by decision-makers if there is not a reliable feedback loop between the process surrounding the technology and city officials (Eggers, 2007; Offenhuber; 2015). Community media is built on platforms that people are already using (whether it is voicemail, radio, or social networking sites) and thus is accessible to intended users and audience members. Since there is no single public sphere with a single communication medium, a robust civil society requires many people using different types of technologies (Costanza-Chock, 2014).

ICTs and the emergence of civic/community media can democratize information and facilitate social bonding, but the digital era is still laced with challenges. Such obstacles include the digital divide and uneven access to digital tools and networks, the digital reproduction of inequality, and the way in which the government deploys information communication technologies for the purposes of exclusion and surveillance of certain communities (Hargittai, 2008; Eubanks, 2011). The digital reproduction of inequality suggests that new media tools may exacerbate existing inequalities by increasing the opportunities available to the already privileged, further marginalizing the
disenfranchised. Also, digital tools do not remove the power imbalances associated with urban politics (Hargittai, 2008).

**Examples of Post-Disaster Community Media**

To better understand the role of community media in planning, I investigate how individuals and groups partake in civic discourse and amplify their voices using digital tools in the disaster context, focusing on post-Katrina New Orleans and post-Sandy New York City. Although community media exists and emerges in places untouched by “natural disasters,” this project focuses on post-disaster cities because extreme experiences reveal dynamics of inequality that are there, but harder to see, in normal circumstances. How does the structure of communication change in a community when technical infrastructure is broken or its members are no longer present due to destruction and evacuation after a disaster?

After Hurricane Katrina struck in 2005, WQRZ-LP, a non-profit, low-power FM radio station based in Bay St. Louis, Mississippi, was one of only four functioning radio stations between Mobile, Alabama and New Orleans, Louisiana. While other local media outlets went off the air during the storm, this station provided vital emergency communication for area residents. Initially the station served a 4-mile radius, and then the Federal Emergency Management Agency (FEMA) assisted the grassroots effort and worked with the Federal Communication Commission (FCC) to increase its signal transmission to thirty miles. FEMA distributed approximately 3,500 radios to survivors that could access the station. Managed and run by Hancock County residents, WQRZ-LP continued to serve as a trustworthy source of information for nearby neighborhoods for two years after the storm. Radio was important during Superstorm Sandy too. The city’s local station WNYC initiated a crowdsourcing strategy to give listeners voice and share on the ground information.

Aside from radio, New Orleanians also obtained and shared information through Internet-based blogging. In fact, 148 current and former individual residents started blogs and annotated maps within 28 months of the storm (Ostertag and Ortiz, 2014). “Many used their blogs not only to disseminate important information to city residents but also to engage what they saw as inaccuracies and degrading content in the national news and the troubling aspects of the national and local recovery efforts” (Ostertag and Ortiz, 2014, p. 60). This activity spurred informal networks and even strong ties among the displaced, helping online users stay in the know (Wagner, 2010). Official neighborhood groups in New Orleans used different web-based platforms such as Yahoo Groups to deliberate, organize, and mobilize around redevelopment plans and policies.

Other participatory initiatives, such as Sandy Storyline, used a micro-blogging platform to collect narratives in the form of texts, photos, videos, and audio recordings from inhabitants throughout storm-affected areas. Through Storyline, residents documented and shared (and

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8 The majority of Katrina bloggers were White, middle-class individuals with college educations. However, all Katrina bloggers expressed grievances with either NOLA representation in national news or government assistance post-disaster (Ostertag and Ortiz, 2015).
continue to do so) their experience with the storm using a phone, mobile device, or computer. The content is organized by neighborhood and provides a window into the lived experience of those who suffered (and still are suffering) from the storm.

The purpose of this dissertation project is to better understand such initiatives and the media ecology of grassroots communication, news generation, and storytelling in the post-disaster context. While the scope of this research only allows me to focus on the role of community media after “natural disasters”, I argue that the findings will be meaningful to any type of urban crisis situation. After all, a “natural disaster” is simply an organic event filtered through a manmade landscape (Steinberg, 2006; Flaherty, 2010).

As Steinberg (2006) demonstrates in his book Acts of God, it is wrong to see these tragedies as nature’s random violence rather than a human-manufactured disaster. In the case of Katrina, human negligence led to the structural failures of floodwalls and levees, causing catastrophic flooding in New Orleans (Steinberg, 2006; Flaherty, 2010). With regard to Superstorm Sandy, Steinberg (2013) points out that New York City local officials allowed for the development of land at the expense of the sea over the last twenty years, and have not invested enough in natural hazard protections because revenue is always the main priority. A 2008 OECD report about the climate vulnerabilities of 136 port cities around the world found that New York City’s “flood defenses lagged behind those of London, Tokyo, Amsterdam, and even Shanghai. Despite its enormous wealth, greater New York has just one-tenth as much protection as these other urban areas, or less” (Steinberg, 2013).

In the same way “natural disasters” are manmade, the societal inequalities that they perpetuate and leave behind are also socially constructed. Challenges with achieving social justice in the city are often correlated with issues of information exchange, which is especially critical and complicated in all crisis situations. Different types of people have diverse ways of seeing the world or clashing epistemologies and ideologies (Brand, 2015; Sandercock and Attili, 2010). The perspective of those with power or the majority population tends to override the views of underrepresented minority groups. Diversity in the city can even lead to impasse due to the inability of individuals to access correct information or truly empathize with one another (Susskind and Cruikshank, 1987). When people use information communication technologies to produce various forms of media, they potentially elevate local knowledge and bridge misunderstandings among diverse groups in the city, as well as spur social movements (Ostertag and Ortiz, 2013; Sandercock and Attili, 2010).

**The Community Question, Civic Engagement, and ICTs**

As ICTs evolve, scholars continuously debate their effects on the concept of “community” as well as civic engagement. Gordon and Mihailidis (2016) succinctly define the polarized views around the umbrella term civic media: “1) all media are civic (media define the structures of social interaction) and 2) all media are the antithesis of civic (media detract from the communities and the public institutions that comprise democracy)” (p. 4). This dissertation project engages that debate
and seeks to better understand concepts such as “civic media” and “community media” in the context of urban planning.

Barry Wellman’s (1979) seminal piece “The Community Question” discusses the Community Lost, Saved, and Liberated paradigms, and has also provided the lens contemporary academics use to understand how ICTs affect community. The Community Lost model asserts that social ties among people within a place are less meaningful as the Wirthian variables of population, density, and heterogeneity increases because individuals are limited members of multiple social networks. The Community Saved model claims even as cities grow, communal solidarities exist because people find and maintain support systems as seen in many ethnic enclaves. Lastly, the Community Liberated model maintains that while primary ties are indeed valuable; they are not just organized in clear, dense areas and that important social ties exist outside of local boundaries (Wellman, 1979).

Advocates of ICTs assert that new technologies bring humans together in communities free from geographic boundaries, aligned with Melvin Webber’s (1964) “community without propinquity” argument and pointing to the Community Liberated paradigm (Shirky, 2008). Innovations in ICTs have allowed for more forms of social networking and though loose networks are less sentimental or intimate, they give access to greater outside resources (Haythornwaite, 2005; Wellman, 2003; Granovetter, 1973). According to Haythornthwaite (2005), ICTs provide the infrastructure for dormant ties, which can be strengthened through shared goals and communication, producing collective efficacy (Sampson, 1997). Shirky (2009) maintains that ICTs such as the Internet allow people to easily form strong networks. Since the Internet addresses freedom of speech, freedom of assembly, and freedom of the press all at once, he contends that the result is rapid group formation.

According to sociologist Keith Hampton (2003), research that shows ICTs are harmful to community is based on two misguided assumptions. The first is to privilege the ICTs as a social system removed from other ways of communication and the second is a tendency to favor strong social ties (Hampton, 2003). In his study of Netville, wired residents recognized three times as many and talked with two times as many more people, and visited 50% more of their neighbors compared to their non-wired counterparts. Additionally, more than 50% of wired residents were involved in protests against the developer, as opposed to 5% in non-wired suburbs. ICTs help develop weak, not strong ties, which in turn fosters collective efficacy (discussed in more detail in chapter 3), demonstrating the Community Saved view (Hampton and Wellman, 2003; Sampson, 2005). Netville demonstrates that the types and flows of communication that take place within social networks cannot be separated from the social and physical ecology in which they are embedded (Friedland, 2016).

On the contrary, critics worry that the increased use of ICTs in society reduces in-person communication and bonding with neighbors and other community members, diverting individuals from interest, investment, and social interaction in their own physical spaces (Turkle, 2012; Putnam, 1995).

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9 Wired residents had high speed Internet in their home with a local online community forum, also known as a specialized Intranet.
This resonates with the Community Lost perspective. For example, Sherry Turkle (2012) warns that even though the Internet and mobile phones allow people to be more connected, they are in fact more alone. She argues that the social ties people form through ICTs are not the ties that bind them into community, they are simply ties that preoccupy individuals. Because a person’s attention is split between the virtual and physical world, no one is engaged in full proper interaction required for building strong relationships (Turkle, 2012).

However, community media actually contradicts both the Community Liberated and Community Lost models because it intensifies in-group communication within a locality. Also, after urban “natural disasters” when environments are in disarray, people can use ICTs to reconstruct physical and social communities in the most vulnerable and destroyed places, complicating this debate and perhaps pointing towards the Community Saved paradigm. According to Raymond Williams (1975), as the size and complexity of social organization evolve in cities, human relations of significance are difficult to identify. This holds true in disaster situations too. Under such circumstances, these relations must be “forced into consciousness” (Williams, 1975, p. 165). Can ICTs and specifically community media force social networks and relations into consciousness in the post-disaster city?

Ostertag and Ortiz (2014; 2015) investigate how spatially dispersed blogging lead to community formation and eventually collective actions in post-Katrina New Orleans. In their research, they summarize three existing arguments about ICTs and civic participation. The adverse effects perspective sees ICTs as harmful to civic participation because they reduce face-to-face interactions and prevent people from strengthening or forming new social ties (Kraut et al, 1998; Nie and Erbing, 2002). Additionally, ICTs such as Internet, television, telephone are used mostly for recreational or entertainment purposes rather than for education and organizing (Ortiz and Ostertag, 2014). The zero-gain effects perspective claims that ICTs neither detract nor enhance civic participation because people who are already engaged simply use these tools as it suits them and transfer their engagement across mediums (Prior, 2005).

Lastly, the positive effects perspective argues that the accessibility of different types of ICTs facilitates participation that would have been difficult or impossible without media technologies (Howard, 2011). Ostertag and Ortiz (2015) found that a number of New Orleans residents (including those who were not civically engaged before) used blogs to mobilize a variety of collective actions in the months and years after Hurricane Katrina, supporting the positive effects perspective. Again, similar to the “Community Question” literature, the relationship between civic engagement and ICTs is unique in the post-disaster context when residents are dispersed and face-to-face interaction is often not possible.

Fischer’s (1992) social history of the telephone and Douglas’s (2004) chronicle of radio in America demonstrates how previous concerns about ICTs are almost identical to what scholars and
the general public inquire about television, cellular devices, and the Internet today. After the phone and radio were introduced into modern society, users asked: did it cause people to become more solitary and less neighborly? Would these ICTs lead to the breakdown of localized community? Joshua Meyrowitz (1985) central argument in his influential book, *No Sense of Place*, is that increasing importance of television in our lives has broken down our sense of place. For Meyrowitz, “place” refers to both distinctions between specific geographical locales and communities, but also to the conventional relationships and hierarchies which have shaped social life. Technology continuously evolves and people use it to create new economic orders and social structures, shaping the physical forms of the metropolis, and the way of life in cities and towns. And yet, the more things change, the discussion regarding technology’s relationship with the community question and civic engagement, shows how much also remains the same.

**From Urban Ecology to Media Ecology**

Both scholars of urban studies and media studies employ the idea of an ecology or ecosystems. Sociologists from the Chicago School of Sociology were interested in understanding the role of ecology in social change, as well as how transformations in ICTs influenced urban dwellers, their social ties, and overall communities (Katz and Hampton, 2016). Communication researchers were focused on understanding propaganda and campaigns by mid-century, and thus media studies became its own distinct field no longer intertwined with investigating the city. As a result, urban studies scholars concerned with local ecologies, place, and neighborhood effects have ignored the role of media or variation in use and access to ICTs. Meanwhile, scholars of media and ICTs may overlook the importance of place or the spatial contexts in which people use digital tools (Katz and Hampton, 2016). I aim to combine these disparate, but related lines of thinking to understand the impacts of mediated civic discourse in cities and their communities. I briefly summarize what is meant by urban ecology and media ecology, as well as discuss recent scholarship that aims to bridge the two fields.

**Urban Ecology**

As industrialization took place in the United States and cities exploded in size with European immigrants and African-American migration, the Chicago School of the early twentieth century sought to understand how urbanization and modernization affected social life in the metropolis, and what factors explained neighborhood organization and change. Influenced by ideas of rationality, which were prevalent in the social sciences at that time, these sociologists aimed to assist policymakers, bureaucrats, and city officials in alleviating the urban problems of disorder, crime, congestion, and poverty (Sampson, 2012). The Chicago School is responsible for the ecological approach to sociology, in which diversity in the city was viewed through scientific concepts of the natural sciences (Lyon, 1999).
Borrowing from Darwin’s “web of life” and “struggle of existence” theories, scholar Robert Park (1915) emphasized that the principal of dominance determined the physical pattern of the city, and that this in turn dictated social relations within the metropolis (Lyon, 1999). A “symbiotic” relationship developed based on the interdependence of the various groups. He identified four ecological processes of social change in cities: competition, conflict, accommodation, and assimilation. These processes were part of a natural order among territorially separated ethnic groups competing for economic and spatial dominance (Park, 1915). Segregation was natural and individual preferences and lifestyle predicted which neighborhood an individual would inhabit in the city. Thus, neighborhoods were “localities with sentiments, traditions, and histories of [their] own” (Park, 1915: 579). Spatial distance between neighborhoods also fostered moral distance between the groups that inhabited them. This meant that some neighborhoods were models of humanity while others, usually ethnic and minority enclaves were in need of uplift based on the habits and customs of its residents. Social disorganization and cultural lag, not industrial capitalism, were at the root of ethnic stratification in the new social science, and cultural, not industrial, “reorganization” was the cure. (O’Connor, 2001)

Burgess (1925) took the urban ecological growth model further with his well-recognized theories of concentric circles based on the metaphor of metabolism. The model theorized that cities were built in concentric rings around a central business district with immigrants, minorities, and low-status workers clustered in the inner-zones walking distance from employment. These were not very desirable residential locations, and as families or households climbed the social and economic ladder, they also moved into further out zones until they finally reached the outer-most, desirable suburban residential zone. Burgess referred to this movement as succession (Burgess, 1925). The model aimed to explain spatial ethnic, minority, and class organization in the city.

More recently, urban ecology has morphed into neighborhood effects research, which emphasizes that place matters when it comes to individual wellbeing (Sampson, 2011). Also, with the increased threats of climate change and natural disasters, the urban ecology tradition is focusing more on the actual biology of the earth (Cutter, Ash, and Emrich, 2014).

**Media Ecology**

“The emphasis on understanding the communicative life of communities – particularly urban ones – through ecological metaphors – had significant potential for helping us understand today’s complex media environment,” claims communications theorist Karin Wahl-Jorgenson. She argues that ecological metaphors are deployed as a shorthand for the complexities of the technological, social, and legal environments that people communicate. Media are like species that interact with one another (Stephens, 2014). Neil Postman (1970) first introduced the term media ecology and described it as “the study of media as environments” which clearly contrasts with the idea of media situated in an environment, such as urban community. His theory was inspired by Marshall McLuhan (1964) who asserted that it was more important to study the medium (technology) rather than the message (content). The interaction between place, technology, and content was not a focus.
However, this study employs a cross-platform analysis rather than focusing on one medium to better understand the short- and long-term use of ICTs and media production in the post-disaster context for varied populations.

Bridging urban ecology and media ecology, Lane (2016) argues that street life in neighborhoods is characterized by online and offline communication. He conducts urban ethnography by not only embedding himself into a community of teenagers in Harlem, but studies and participates in their digital life as well. Similarly, communication infrastructure theory (CIT), which was developed by communications scholar Sandra J. Ball-Rokeach, considers how neighborhood communication patterns are interconnected with the health of communities and their residents (Wilkin, Moran, Ball-Rokeach, Gonzalez, and Kim, 2010). CIT suggests that neighborhoods have multi-level communication infrastructures, referred to as storytelling networks (STNs) that influence resident health. Storytelling networks include community organizations, local/ethnic media, and neighborhood residents. The strength of an STN is determined by several neighborhood level factors such as safety or the presence of public spaces (Wilkin et al, 2010). Strong STNs lead to positive health outcomes at the individual and community level (Wilkin et al, 2010). To that end, storytelling neighborhood is the communication process through which neighborhood discussion transforms people from individual occupants of a home to members of a spatial community with a sense of belonging (Ball-Rokeach, Kim, and Matei, 2001).

Broad and his colleagues (2013) conducted a study in Los Angeles to better understand the media ecologies of various community-based activist organizations. With respect to digital tools, these researchers found that practitioners were frustrated that they lacked strong connections with media producers, and wanted to more effectively get their organization’s story embedded in the local communication infrastructure. They had little trust that major mainstream television and newspaper outlets would provide accurate depictions of their social change efforts. Furthermore, theorist Lewis Friedland (2001) argues that the structure of communication in any given community explains a great deal of the remaining variance in a community’s capacity for democratic action. Communities have different capacities for responding to similar sets of system level constraints, and these can be explained through the degree of communicative integration (Friedland, 2001). In this dissertation, I also fuse together urban ecology and media ecology, and thus use the term community media to refer to the mediated civic discourse that I study because there is an important relationship between ICTs (the medium), and the message, and place.

Community Media and Resilience

One cannot study disaster recovery and rebuilding, without engaging resilience. The idea of resilience exists in many fields including engineering, ecology, psychology, business, and economics (Vale, 2014). In general, it is a theory about how systems respond to shock and disruption. Urban
resilience is the ability of a city to “bounce back” after trauma and raises crucial questions about equity. Vale and Campanella (2005, p. 13) outline these dilemmas in the *The Resilient City*:

- Who sets the priorities for the recovering communities?
- How are the needs of low-income residents valued in relation to the pressing claims of disrupted businesses?
- Who decides what will be rebuilt where, and which voices carry forth the dominant narratives that interpret what transpires?
- Who gets displaced when new facilities are constructed in the name of recovery?

From these questions, it remains unclear as to what the post-disaster city is “bouncing back” to and who in the city this “bouncing back” involves. While the definition of resilience involves “physical bounce-back”, it also includes “socio-economic networks”, and “psychological recovery” (Vale, 2015, p. 625). Community media addresses all three aspects. For example:

**Table 1.2 Resilience (based on Vale, 2015) and Community Media**

<table>
<thead>
<tr>
<th>Resilience</th>
<th>Immediate</th>
<th>Long-Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>physical bounce-back</td>
<td>Low-power FM radio helps those in destroyed areas know where to go for resources and help in the surrounding areas.</td>
<td>The Yahoo groups people started and joined in post-Katrina New Orleans neighborhoods led to the creation of neighborhood Masterplans.</td>
</tr>
<tr>
<td>socio-economic networks</td>
<td>Social networking sites allow people to connect with one another to share resources.</td>
<td>In post-Sandy NYC, HUD is funding the creation of wireless networks in six low-income; climate vulnerable communities and will hire residents in these developments to build the network.</td>
</tr>
<tr>
<td>psychological recovery</td>
<td>Blogging gives individuals a space to vent their frustrations and find others in similar situations.</td>
<td>Memorialization projects such as documentaries or oral history projects address and assuage collective trauma.</td>
</tr>
</tbody>
</table>

Logistically, resilience embraces four main chronological steps: rescue, restoration, rebuilding, and remembrance (Haas et al., 1977). Rescue encompasses immediate emergency response dealing with death and injury. Restoration involves reestablishing major urban services whereas reconstruction aims to rebuild to pre-disaster levels. Lastly, remembrance aims to
commemorate the crisis. Most research about ICTs and resilience focus on either how well communication networks operate during disasters or the strategic value of tools in achieving rescue and restoration. Current studies about ICTs, disaster, and resilience explore how large aid organizations of government agencies use social media to obtain and release information, to collect on the ground data, deploy the appropriate resources, or track individuals (Cheng et al, 2015; Masten & Obradovic, 2008; Yates and Patridge, 2015).

The field of disaster resilience is heavily data-driven and overpopulated with various tools, indices, and scorecards to measure “bounce-back” or progress after crisis at different points in time at various scales (Cutter, 2015). Resilience can refer to a person, an individual structure, households, businesses and organizations, community or neighborhood, infrastructure, and larger systems, and indicators are meant help officials prioritize certain needs and goals (Cutter, Ash, and Enrich, 2014). Data-driven charts to pre-disaster levels are simply aggregated remarks that miss the stories and politics of recovery and rebuilding. In this way, ideas about resilience can be harmful to democratic processes during post-disaster planning because technical measurements and definitions about what resilience should be may override actual experiences and needs on the ground. Common post-disaster rhetoric such as “build back better” or “emerging stronger” misses how people work through trauma in real-time.

Common proxy variables such as the feeling of belonging, the number of civic organizations or the number of community services in a neighborhood, or prior experience with recovery point to capacities such as social capital, community assets, and connectivity that help officials measure community resilience (Cutter, 2016). Paying particular attention to scale and the equity dimension of resilience, this research seeks to provide a more anthropological and qualitative understanding of “bounce-back” through the study of community media. How does the process of using ICTs to create community media lead to feelings of belonging, affect civil society, and influence the individual and collective capacity to process trauma in the short and long term?

Research Questions

This dissertation project engages and contributes to three theoretical debates. First, this research investigates if and how community media is a platform for “subaltern counterpublics” to amplify minority voices and facilitate collective actions in the aftermath of disaster. Second, this research aims to better understand the important relationship between communication and community by fusing together the urban ecology and media ecology traditions. It challenges the ongoing debate about the concept of community in the digital era since few researchers have explored this question when physical surroundings and homes are destroyed or made uninhabitable due to disaster. Third, this research provides new insights about how the presence and different uses of ICTs contribute to community resiliency in the immediacy of and years after the disaster.
Few academics have investigated the grassroots use of such technologies and how it relates to the urban politics of community development, as well as longer-term rebuilding and resilience. I am interested in how marginalized groups in the most destroyed neighborhoods use community media to recover and rebuild in the city because disaster “resilience can only remain useful as a concept and as progressive practice if it is explicitly associated with the need to improve the life prospects of disadvantaged groups” (Vale, 2014, p. 191). The research questions for this project are as follows:

1) How do people use information communication technologies (ICTs) to create community media in the aftermath of a disaster during recovery and rebuilding?

2) What are the various purposes of this community media?

3) Does the grassroots use of ICTs in the post-disaster context lead to new forms of social relations and civic engagement in the digital era?

4) What are the benefits of community media and at what scales (individual, group, city-wide) do these gains manifest?

Research Design

To answer these questions, I conducted a comparative case study of community media efforts that emerged in the aftermath of Katrina (2005) and Superstorm Sandy (2012). I used snowball sampling to conduct 94 semi-structured interviews (49 in New Orleans and 45 in New York City) with community-media makers, related program participants, journalists, technologists, funders, non-profit workers, and policy officials. Given that more than ten years have passed since Katrina, a retrospective analysis of the ongoing community media efforts and their effects on recovery in New Orleans allowed me to frame, theorize, and better understand the influence of community media on rebuilding in New York City. From 2005 to 2012, new media tools and social networking sites have evolved and advanced enormously. For instance, YouTube, Facebook and Twitter only became publicly open social networking sites in 2006, a year after Katrina struck. By 2012, in post-Sandy New York City, these platforms were some of the most popular places online for people to share and retrieve information. Similarly, in 2005, just 2% of American cell phone subscribers owned a smart phone, and by 2012, 52% of American cell phone subscribers owned one of these (Pew Research Center, 2015).

10 Chapter 2 provides more details.
11 During my two months of fieldwork in New Orleans, I discovered that the digital divide is not quite as stark as researchers think. Many community-media makers from minority, low-income neighborhoods expressed that tech tools were and are readily available to them and their networks.
I treated the evolving nature of ICTs in these two cases as a continuum to better understand the shifting community media landscape in disaster recovery and rebuilding. As I conducted my research, I was cognizant of the advancing nature of the tools that allowed individuals and organizations to design and participate in community media production. This research project is primarily concerned with understanding the intentions and goals of community media. Therefore, the differentiation in technological platforms among community media programs is not the primary variable of interest.

While I anchored this study in the two cities of New Orleans and New York City, I focused my investigation at the scale of the community media program. Sometimes these programs are rooted in acknowledged neighborhoods, and other times the community media’s connection to space may just be at the city-level, and more entrenched in a non-spatial social network. Since my unit of analysis was the community media program itself, I was flexible as to how I studied specific initiatives given the diversity of the examples. I used various methods to conduct my research including participant-observation, participatory action research, secondary document analysis, and semi-structured interviews with community media makers and consumers, as well as policy officials.

My project takes the form of a compositional dissertation, in which analysis occurs through detailed exploration of new terrain. Since the grassroots media activities in the post-disaster context are under-theorized, I analyzed this data using emergent codes and grounded theory to develop a typology of post-disaster community media. After identifying seven types of initiatives, which are not mutually exclusive, I completed two in-depth case studies of programs that embodied aspects of each category, exemplifying the last classification of “income-generate.” The first case-study is of 2-Cent Entertainment, a collective of Black youth YouTube activists in New Orleans. The second case-study is of the Red Hook Digital Stewards, a group of Black and Latinx young adults, well-known for building Red Hook WIFI, a neighborhood intranet/Internet network in Brooklyn, New York City. These initiatives highlight different components of the typology, and demonstrate how the purposes of community media evolve and change, but remain an important component of community development and resilience, especially in the post-disaster context.

**Dissertation Outline**

The dissertation is divided into four parts. Part 1 includes this section, *Chapter 1: Introduction* and *Chapter 2: Methodology*. In this first Chapter, I have outlined the project, literatures, and research questions. In Chapter 2, I provide background about post-Katrina New Orleans and post-Sandy New York City. I detail how I developed the typology using the “N of One plus Some” approach and outline the various codes that emerged. I discuss the process and challenges of embedding myself within 2-Cent Entertainment and the Red Hook Initiative, emphasizing reciprocity and giving back to
communities in which inquiry is based. I employed Michael Burawoy’s extended case method, which underscores the reflexive role of the researcher.12 Limitations of the research are also presented.

Part 2 consists of Chapter 3: The Post-Disaster Community Media Typology. In this section, I show where planning and public participation literature has fallen short. I introduce the seven primary action(s) of community media and the progression of these activities including: to inform (resource-sharing), to investigate (bottom-up journalism), to incite (organize for place), to include (crowd-sourced deliberation), to interact (therapeutic networking), to interpret (memorialize), and to income-generate (economic self-determination). Using thick description, I describe forty community media initiatives. These mini cases or less detailed examples allow me to illustrate the contours of the different categories and confirm the generalizability of the post-disaster community media typology.

The next section of the dissertation, Part 3 includes the two in-depth case studies. Chapter 4 is about 2-Cent Entertainment, a group of African-American YouTube activists who used hip-hop to resist unjust policies in post Katrina New Orleans, and Chapter 5 is about a group of African-American and Latinx youth who built Red Hook WiFi in post-Sandy Brooklyn. I tell the story of each initiative and analyze the impact of the efforts on the media makers themselves, their social/spatial community, and the overall city. Part 4 of the dissertation ends with Chapter 6: Comparisons, Conclusions, and Recommendations where I compare and contrast the two case studies, revisit definition such as community/civic media, and offer lessons for practitioners. I explain why and how community media is an important facet of recovery, rebuilding and resilience.

Beyond disasters, I return to the typology and offer new conceptualizations of public participation in the digital age, focusing on a media justice lens. I argue that the current economy is not set up to support these needed community development activities and that planning as well as communication scholars and practitioners must re-imagine different ways to sustain autonomous community-controlled media spaces. I discuss the implications of my findings for the disasters that struck Texas, the Caribbean, and Puerto Rico in 2017 while I wrote this dissertation, explaining why and how community media is essential as policy-makers, first responders, and residents rebuild in these post-disaster contexts.

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12 In the Appendix, I also describe the Participatory Action Research (PAR) survey that I co-designed and co-analyzed with Red Hook Initiative staff and Red Hook Digital Stewards, and review the process of PAR. I offer reflections on PAR from both the perspective of the academic researcher and community researchers.
Chapter 2

Research Contexts & Methodology

CHAPTER SUMMARY: This chapter provides background information about post-Katrina New Orleans and post-Sandy New York City and also explains why community media from both these contexts are comparable. It describes the information communication technology landscape in 2005 versus 2012 to situate the various examples in the next chapter. Subsequently, it presents the research design, data sources, and process for analyses. Limitations of the research are also discussed.

Two Contexts for Case-Study Comparison

Case study inquiry “copes with the technically distinctive situation in which there will be many more variables of interest than data points, and...relies on multiple sources of evidence, with data needing to converge in triangulating fashion” (Yin, 2009, p.18). This dissertation employs an embedded cross-case analysis in which I attempt to draw generalizable conclusions by studying multiple community media examples from two specific contexts. In the United States, contemporary academic scholarship and practitioner knowledge about disaster recovery, rebuilding, and resilience is largely conditioned by Hurricane Katrina (2005) and Superstorm Sandy (2012). Therefore, I conducted a comparative case study of community media efforts in the post-Katrina New Orleans region and post-Sandy New York City region for this research project. Some creators and participants of the community media efforts, as well as the production process of the media itself, were located outside the boundaries of the cities. For example, Bridge the Gulf is an online storytelling platform that engaged residents in Mississippi, Alabama, and other parts of Louisiana beyond New Orleans. Similarly, Occupy Sandy operated not only in New York City, but also in Long Island and New Jersey.

While the political environments and economies of New Orleans and New York City are vastly different, the on-the-ground experiences of victims (especially minority and lower-income ones) share many similarities because inequality exaggerates the effects of disasters on at-risk populations (Greenberg, 2013; Corbin, 2015). New Orleans and New York City each have a long history of marginalizing “the other” – from African-Americans to immigrants to low-income populations (Greenberg, 2013). Both cities also serve as media headquarters for their regions, the mid-Atlantic area and Gulf South, respectively (Project for Excellent in Journalism, 2012). Of course, New York City also serves as a global media headquarters unlike New Orleans.

Katrina

Katrina downgraded to a category 3 storm by the time it hit New Orleans on August 29th, 2005 with sustained winds averaging over 120 miles per hour (Plyer, 2016). It was one of the deadliest and most destructive natural disasters in American history, killing 1,833 people. The hurricane also displaced more than a million people in the Gulf region, and 600,000 were still displaced a month later (Plyer, 2016). In New Orleans, 53 levees were breached causing 80% of the city to flood. The
primarily African-American neighborhood of the Lower Ninth Ward and the majority Vietnamese neighborhood of Village de l’Est in New Orleans East endured the most severe property damage of which approximately 95% of housing units were destroyed (Kamel, 2012). Before Katrina, the population of New Orleans was 454,863 residents and 11 months after the storm it was about 230,000 residents. According to the *Time-Picayune*, 100,000 New Orleanians were still displaced in 2010, five years after the storm. By 2015, ten years after the storm, the population had increased to 386,617, but many of these residents were newcomers and thousands still had not returned since Katrina (Byrner et al, 2017).

Figure 2.1 Hurricane Katrina Flooding in New Orleans

*Image of a map showing flood extent with neighborhoods and major roads.*

Sources:
FEMA (Sept 11th flood extent),
City of New Orleans Planning Commission (neighborhood boundaries),
Census TIGER (streets and natural boundaries)
**Superstorm Sandy**

Seven years later, on October 29th, 2012, Superstorm Sandy hit New York City and New Jersey, but its impact was felt all over the world since the financial capital had to shut down for two days. Forty-three people lost their lives in New York City due to the storm (*Sandy and Its Impacts*, 2013). The International Displacement Monitoring Centre (IDMC) estimated that 776,000 people were displaced immediately after Sandy in 2012, and three years later in 2015, IDMC estimated that 53,500 people were still displaced. All neighborhoods across the City were affected, but Sandy hit five coastal areas especially hard including the Brooklyn-Queens Waterfront, the East and South Shores of Staten Island, South Queens, and Southern Brooklyn. These five areas housed about 685,000 people at the time of the storm. The poverty rate in flooded areas was higher than the poverty rate in dry tracts. One-third of the flooded census tracts had a poverty rate of 20% or higher. Census tracts with centroids within the storm surge were 43.2% white whereas the tracts that experience no flooding were 30% white. Black New Yorkers, particularly poorer ones, were more likely to live in flooded areas. Flooded tracts had a slightly higher Black representation of 29.2% versus dry tracts of 24.8%. While Latinos were not as likely to live in flooded areas, those that did had average lower incomes than Latinos in dry census tracts. The least-flooded boroughs, the Bronx and Queens had large Latino and Asian populations, respectively. Transit disruptions after the storm had the greatest impact on Asian and Latino communities, especially in Queens (Faber, 2015).

Figure 2.2. Superstorm Sandy Flooding in New York City

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13 More detailed statistics and patterns about neighborhoods and populations affected by Superstorm Sandy can be found in Jacob William Faber’s 2015 article “Superstorm Sandy and the Demographics of Flood Risk in New York City” published in *Human Ecology*. 
In 2014, The Wall Street Journal reported that Katrina and Sandy were also the two costliest American disasters. Katrina cost approximately $67.8 billion in insured losses (as measured in 2012 dollars) and Superstorm Sandy cost about $26.4 billion in insured losses (also measured in 2012 dollars). Many researchers have compared disasters in the two cities (Gotham and Greenberg, 2008; Cody et al, 2016; Bryner et al, 2017). For example, Gotham and Greenberg (2008) used 9/11 and Hurricane Katrina to analyze post-disaster recovery in New York City and New Orleans. Even though the “disaster triggers” were different in each city, the authors show that the respective local governments employed very similar, market-oriented approaches for rebuilding. They argue that both cities became important laboratories for neoliberal policy reforms, and that these market-centered approaches deepened the equity problems the policies sought to remedy.

During these two urban crises, redevelopment in the name of recovery directed billions of public dollars to powerful industries, real estate developers, corporations, and already wealthy neighborhoods (Greenberg, 2013; Loewenstein, 2015). Uneven development is a widespread occurrence and challenge in most cities after disasters and crisis (Vale and Campanella, 2005). Author Naomi Klein (2005; 2007) describes the phenomenon of “disaster capitalism” in which government officials and real estate developers manage rebuilding as a lucrative industry rather than a true and equitable healing process to recover what was lost. She provides the example of 2004 tsunami relief in which hotels and large corporations quickly began developing coasts in Sri Lanka, Thailand, Indonesia, and India, while families from these same coasts were forced to relocate inland.

Post-Katrina New Orleans and post-Sandy New York City exemplify this neoliberal framework (Greenberg, 2013). While local organizers and advocacy groups did win some victories in both cities, rebuilding was still largely characterized by uneven redevelopment. Increasing wealth, population, and infrastructure for affluent neighborhoods like New York’s Financial District and New Orleans’ French Quarter and Lakeview took precedence over the needs of low-income neighborhoods such as the Lower East Side, Chinatown, Red Hook, Coney Island, Far Rockaway, sections of the Bronx and Queens in NYC, and the Lower 9th Ward, Treme, and Village de L’Est in New Orleans East (Jaffe, 2013).

Nonetheless, there were also clear differences in rebuilding outcomes between the two places. For example, over 400 New York City Housing Authority (NYCHA) buildings containing 35,000 housing units lost power, heat, and/or hot water during Sandy (Sandy and Its Impacts, 2013), and in the Spring of 2015, three years after the storm, FEMA awarded New York City a $3 billion grant to repair and stormproof 33 public housing developments throughout the city in Brooklyn, Manhattan, and Queens (Grynbaum, 2015). By contrast, after Katrina, the city council voted to demolish 4,500 public housing units (most of which were structurally unscathed by the storm) of the “Big Four” developments: St. Bernard, B.W. Cooper, Lafitte, and C.J. Peete, and rebuild mixed-income neighborhoods. This planned destruction signaled to public housing residents that they were not welcome back into their city (Gratz, 2015). Over 20,000 residents were displaced because of this (Amnesty International, 2010; Dewan, 2007).
Table 2.1 Summary of Contexts: Comparative Case Study of Community Media post-Katrina and post-Sandy

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Community media efforts are a component of recovery; NYC serves as the media</td>
<td>Community media efforts are a component of recovery; NOLA serves as the media</td>
</tr>
<tr>
<td></td>
<td>headquarters for the mid-Atlantic region.</td>
<td>headquarters for the Gulf South region.</td>
</tr>
<tr>
<td></td>
<td>Exemplifies recovery characterized by uneven development</td>
<td>Exemplifies recovery characterized by uneven development</td>
</tr>
<tr>
<td>Differences</td>
<td>Economic powerhouse city with population of 8.4 million at time of disaster.</td>
<td>Poor city with large tourism industry with population of 455,188 at time of disaster.</td>
</tr>
<tr>
<td></td>
<td>Community media influenced by Web 2.0 and ICTs, which have evolved and more</td>
<td>Very small percentage of population owned smart phones. Low-powered FM</td>
</tr>
<tr>
<td></td>
<td>accessible since 2005.</td>
<td>Radio plays a bigger role than social media. Internet is an important</td>
</tr>
<tr>
<td></td>
<td></td>
<td>connection tool for the displaced.</td>
</tr>
</tbody>
</table>


Given that more than ten years have passed since Katrina, a retrospective analysis of the ongoing digital community media efforts and their effects on recovery in New Orleans allowed me to frame, theorize and better understand the influence of digital community media on rebuilding in New York City. From 2005 to 2012, new media tools and social networking sites have evolved and advanced enormously. For example, Friendster started in March 2002; MySpace went live in August 2003; Facebook was founded in February 2004; YouTube launched in February 2005; and Twitter was invented in March 2006. By 2012, in post-Sandy New York City, these platforms were some of the most popular places online for people to share and retrieve information. In 2005, 68% of adults used the Internet regularly whereas in 2012, 83% of adults used the Internet regularly (Perrin and Duggan, 2015). The gaps between Internet users of lower and higher incomes, as well as minorities and whites

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14 It was not possible to obtain this trend data by city, which would have been more useful in understanding the information and communication ecologies in New Orleans and New York City during their respective disasters. U.S. Census did not collect it at the city or state level for these time periods. While the Federal Communication Commission (FCC) has been publishing access to broadband reports since 2010, that data was also not disaggregated in a useful way. There are marketing and commercial databases that sell the data for a very high cost. I contacted the Pew Research Center to see if they had the data disaggregated by city or state, but received no response.
has decreased between 2005 and 2012 (See Tables 2.2, 2.3 and Figures 2.3, 2.4). Interestingly enough, racial differences are not evident as social media usage has grown from 2005 to 2012 (See Tables 2.4) but there was a difference in use by income level (see Table 2.5) (Perrin, 2015). Lastly, in 2005, just 2% of American cell phone subscribers owned a smart phone, and by 2012, 52% of American cell phone subscribers owned one of these (Information Consumer Technologies, 2010).

This trend data is not disaggregated by city or state, and I acknowledge that Louisiana and New York have always had very different economies and populations. Since 2000, The Federal Communications Commission (FCC) has published reports regarding the availability of “advanced communications capability” (previously referred to as broadband) to Americans, and only recently made this data available disaggregated by state. For example, in 2012, 29.6% of people in Louisiana did not have access to fixed broadband meeting the speed benchmark whereas only 10.4% of people in New York did not have access (Federal Communications Commission, Eighth Broadband Progress Report, 2012). By 2016, 19% of people in Louisiana did not have access as opposed to 2% of people in New York (Federal Communications Commission, Tenth Broadband Progress Report, 2016). Regardless, the national statistics still provide an understanding of the overall Internet-based communication landscapes post-Katrina and post-Sandy.

<table>
<thead>
<tr>
<th>Year</th>
<th>Asian, English-Speaking</th>
<th>White, non-Hispanic</th>
<th>Hispanic</th>
<th>Black, non-Hispanic</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>75%</td>
<td>70%</td>
<td>71%</td>
<td>49%</td>
</tr>
<tr>
<td>2012</td>
<td>97%</td>
<td>85%</td>
<td>81%</td>
<td>78%</td>
</tr>
</tbody>
</table>


16 During my two months of fieldwork in New Orleans, I did discover that the digital divide is not quite as stark as researchers think. Many community-media makers from minority, low-income neighborhoods expressed that tech tools were available to them and their networks. However, paying for data plans on mobile were at times challenging.

17 Advanced communications capability is a statutory term and “is defined, without regard to any transmission media or technology, as high-speed, switched, broadband telecommunications capability that enables users to originate and receive high-quality voice, data, graphics, and video telecommunications using any technology” (Federal Communications Commission 2016 Broadband Progress Report).
Figure 2.3 Internet Usage by Race

Table 2.3 Internet Usage by Income in 2005 and 2012

<table>
<thead>
<tr>
<th>Year</th>
<th>$75K+</th>
<th>$50K-74,999K</th>
<th>$30K-49,999K</th>
<th>Less than 30K</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>92%</td>
<td>86%</td>
<td>73%</td>
<td>49%</td>
</tr>
<tr>
<td>2012</td>
<td>71%</td>
<td>87%</td>
<td>93%</td>
<td>97%</td>
</tr>
</tbody>
</table>

Figure 2.4 Internet Usage by Income in the United States

Table 2.4 Racial Difference Barely Evident in Social Media Use between 2005 and 2012

<table>
<thead>
<tr>
<th>Year</th>
<th>White, non-Hispanic</th>
<th>Black, non-Hispanic</th>
<th>Hispanic</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>7%</td>
<td>6%</td>
<td>10%</td>
</tr>
<tr>
<td>2012</td>
<td>55%</td>
<td>52%</td>
<td>54%</td>
</tr>
</tbody>
</table>

Table 2.5 Social Media Usage by Income in 2005 and 2012

<table>
<thead>
<tr>
<th>Year</th>
<th>$75K+</th>
<th>$50K-74,999K</th>
<th>$30K-49,999K</th>
<th>$Less than 30K</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>12%</td>
<td>8%</td>
<td>8%</td>
<td>4%</td>
</tr>
<tr>
<td>2012</td>
<td>69%</td>
<td>59%</td>
<td>58%</td>
<td>50%</td>
</tr>
</tbody>
</table>


Figure 2.5 Evolution of Technology Adoption in the United States, 2000-2016


I treated the evolving nature of ICTs in these two cases as a continuum to better understand the shifting community media landscape in disaster recovery and rebuilding. As I conducted my research, I was cognizant of the accessibility of new tools and platforms that allowed individuals and organizations to design and participate in community media production. This research project is primarily concerned with understanding the intentions and goals of community media. The differentiation in technological platforms among community media programs is not the primary variable of interest because I was interested in the larger media ecology in which initiatives emerged immediately and long after the respective disasters. I investigated and analyzed the relationship that these mediums have with the community media maker’s goal and outcomes.

Since 2004, the Project for Excellence in Journalism\(^{18}\) has released an annual report on the state of American journalism. In the 2006 report\(^{19}\), the first sentence reads: “Scan the headlines of 2005 and one question seems inevitable: Will we recall this as the year when journalism in print began to die?” Additionally, the report continues: “Power is moving away from journalists as gatekeepers over what the public knows. Citizens are assuming a more active role as assemblers, editors, and even creators of their own news.” As mentioned previously, social networking sites were becoming more common during this time, facilitating the rise of citizen journalism.\(^{20}\) The citizen journalism phenomenon may have been occurring not only because of increased Internet and social networking site usage, but also due to an information gap in cities. The number of Metropolitan reporters had decreased by half between 1990 and 2005 in several urban areas (The State of the News Media, 2006). This was the national news environment in which Katrina was reported. After the disaster, news sites and other websites were experimenting with the Internet and social networking sites for crisis communication in ways that no one had ever done so before. This dissertation will detail some of these initiatives in the following chapters, and I have listed additional examples below:

- The New Orleans Times-Picayune started forums for each neighborhood on its site for people to connect and share information.
- The Sun-Herald in South Mississippi created an online guestbook for remembering victims of Katrina and published small town damage reports.\(^{21}\)
- The online classified site, craigslist.org became a popular digital gathering space and flagged affected citied, creating specific search categories for survivors such as “temporary housing” and “lost and found.”
- Major news networks such as MSN video, CNN, and Fox News, and WWL TV (the CBS affiliate) all offered live streaming coverage once Katrina hit.
- The photo-sharing site Flickr, which had just launched in 2004, and hundreds of amateur photographs loaded their photos after the storm and tagged them “hurricanekatrina” for easy viewing.

Meanwhile, the 2013 report lamented the continuous signs of the diminishing state of reporting power. In 2012, newspaper newsroom cutbacks put the industry down 30% since 2000. The news industry was overtaken by technology giants such as Google and Facebook that began to sell advertisements via geo-targeting to small-scale, local businesses that once went to local media outlets, financially threatening these local media outlets (The State of the News Media, 2013). Social media expanded its role in the news ecosystem, and in fact, as of 2013, 184 news organizations

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\(^{18}\) The Project for Excellence in Journalism was an American research organization founded in 1997, and in 2014 it was renamed the Pew Research Center’s Journalism Project.

\(^{19}\) I consulted the 2006 report because it analyzes what occurred in 2005 (when Katrina made landfall).

\(^{20}\) The history of the term is explored in more depth in Chapter 3.

\(^{21}\) More detailed information about The New Orleans Times-Picayune in Chapter 3.
around the country had designated social media editors. In preparation for covering Superstorm Sandy, Time Magazine contacted five semi-professional photographers in the mid-Atlantic region that were heavy users of the photo sharing site, Instagram, and gave them control of Time’s account to document the storm in real time. Journalists began using the expanded search function on Facebook to find sources from users and contributors of the site. During Sandy, an editor might have queried “photos posted of Coney Island in October 2012” (The State of the News Media, 2013). Also, the report states: “The clearest pattern of news audience growth in 2012 came on digital platforms, and the proliferation of digital devices in peoples’ lives seemed to be a big part of the reason.” These trends verify why this research project focuses on digital community media.

Research Design

Unit of Analysis

While I anchored this study in the two cities of New Orleans and New York City, I focused my investigation at the scale of the community media program. Sometimes these programs are rooted in acknowledged neighborhoods, and other times the community media’s connection to space may just be at the city-level, and more entrenched in a non-spatial social network. Since my unit of analysis was the community media program itself, I was flexible as to how I studied specific initiatives given the diversity of the examples.

Data Collection

I relied on four main forms of data for this study: semi-structured qualitative interviews, document analysis, ethnography and participant observation, as well as a participatory action research (PAR) survey. I drew from Burawoy’s (1998) extended case method, which applies reflexivity or engagement with the world one studies to ethnography. Burawoy argues that important social dynamics reveal themselves when the researcher interacts with and “distorts” (as the positivist researcher would say) the world one studies. To that end, the PAR process allowed me to learn about the lives of young adults in Red Hook in a deep and intimate way. The role of theory is also important in the extended case method as it guides how the researcher interacts with community members, and thus theory becomes an intervention in the world one studies (Burawoy, 1998). Even though this was an inductive research project, the questions I sought to answer were informed by the theories I outlined in Chapter 1, thus influencing the way in which I interacted with community media makers on the ground.

The research project is based on eight months of field work in which I spent four months in New Orleans and four months in New York City. I conducted semi-structured interviews with 49 participants regarding post-Katrina community media and 45 participants regarding post-Sandy community media, totaling 94 interviews (See Appendix). Interviewees consisted of community-
media makers, related program participants, journalists, technologists, funders, non-profit workers, and policy officials.

Sampling followed a snowball method, and I recorded interviews when given permission. I began by identifying post-disaster community media programs through Internet searches, and contacted the individuals who either launched or participated in them. These individuals then directed me to other community media programs as well as affiliated funders, non-profit workers, and policy officials. I also had several informal, unstructured conversations with my respondents throughout the course of the project. When interviewing community-media makers, I asked them why they created what they did and what they saw as the successes and challenges of their productions. This usually led to conversations about the creation process, and the various human interactions that occurred as well as the relationships that formed during that process, because all the community media examples had a social element. When interviewing funders and policy officials, I asked how they evaluated these community media efforts, and what they learned from the various products.

I also studied the community media outputs and triangulated the “documents” which took the form of blog posts, photographs, films, YouTube videos, tweets, chat forum transcripts, websites, radio shows, among others with the associated semi-structured interviews. While not all the forms of media I analyzed were visual (though most had a visual element), I found Nicholas Mirzoeff’s book *How to See the World* very useful throughout my investigation. Visual culture – and I extend the following argument to media culture – is the relation between what is seen, how we make sense of it, and what we call it. Mirzoeff writes, “Visual culture today is the key manifestation in everyday life of what sociologist Manuel Castells calls ‘the network society,’ a way of social life that takes its shape from electronic information networks (1996). It is not just that networks give us access to images – the images relate to networked life on- and offline and the ways we think about and experience those relations.” (Mirzoeff, 2016, p. 12). As I read, listened to, viewed, and watched the several forms of community media, I continually analyzed how creators and consumers understood the content, and how that process reflected their worldviews.

To better understand the social processes, evolution, and trajectories of community media programs, I completed ethnography and participant observation of two groups: 2-Cent Entertainment LLC in New Orleans and the Red Hook Digital Stewards in Brooklyn, New York City. I will further elaborate why I chose these programs as my two in-depth case studies in the next section where I outline my phases of research, but first will explain my relationship to each group. I embraced the value of reciprocity in my research. Reciprocity is “defined as an ongoing process of exchange with the aim of establishing and maintaining equality between parties” (Maiter, Simich, Jacobson, and Wise, 2008, p. 305).
For me, as a matter of fairness, it was important to give back to the groups from which I was extracting information. Aside from ethics, the principle and practice of reciprocity has important implications for the level of trust between the researcher and informants, affecting the credibility, reliability, and validity of data, as well as the significance of the community-based research (Bradbury and Reason, 2003; Gupta and Kelly, 2014). By building a strong relationship with community members, the research has internal credibility because participants recognize the connection to their local situation. The research also has external credibility because outsiders who did not participate in the inquiry believe the results are legitimate. Trust between the researcher and community members also facilitates the exchange of reliable information and the incorporation of participants’ viewpoints in interpreting results, leading to valid findings (Greenwood and Levin, 2006).

Lastly, reciprocity recognizes that partners in the research process have varying amounts and types of power in different circumstances, along with diverse interests in a specific project. Thus, each person involved in the research process benefits from dissimilar aspects of the project. The production of knowledge is not disembodied, and researchers must be reflective about where they are coming from, who they are, and how they relate to those they work with and observe (Haraway, 1988; Collins, 2002; Gupta and Kelly, 2014).

Since 2-Cent Entertainment seized operating when I was in New Orleans for fieldwork, I could not embed myself into their organization. Aside from 2-Cent’s YouTube videos and social media activity, I depended mostly on interviews with seven members of the collective, and had several informal conversations with the three founding members. Additionally, I spent a lot of time “hanging out” at the #studiobe warehouse space where founding member Brandon Odums had a graffiti exhibition. The #studiobe warehouse became a community gathering space for former and current 2-Cent member and friends. By spending time there, I was able to build rapport with the members, and gain important insights about the history and present-day circumstance of the collective. In each of my 2-Cent interviews, respondents would discuss the challenge of funding the financial sustainability of the organization. For this reason, I voluntarily developed a large database of grants for the group as a form of reciprocity.

I secured a summer position with the Red Hook Digital Stewards program at the Red Hook Initiative, and thus was able to complete an ethnography and participant observation of the program and the neighborhood use with Red Hook WIFI. For three months, I worked alongside Digital Stewards and program staff for twenty hours a week as a media instructor and program evaluator. This unique position also allowed me to co-design, co-administer, and co-analyze a participatory action research survey about Red Hook WIFI with the Digital Stewards. While the results of the survey informed the conclusions of this dissertation, the PAR process was a critical tool for relationship building between me, Red Hook Initiative staff, as well as the Red Hook Digital Stewards. I describe the PAR process in detail in the Appendix.
By incorporating PAR into this research and building strong relationships with the Digital Steward researchers, I argue that my findings and conclusions are credible, reliable, and valid. I shared drafts of the Red Hook WIFI case-study chapter of this dissertation with two Red Hook Initiative staff members, Tony Schloss and Anna Ortega-Williams, who were also my supervisors when I worked at the non-profit. Schloss and Williams were also key interviewees for this research. The final version of the case-study reflects their feedback and insights, and is an example of practicing the extended case method. Embracing the philosophy of reciprocity, in February 2017, I raised funds from the MIT Department of Urban Studies and Planning to bring three Red Hook Digital Stewards from Brooklyn (two of whom had never left NYC) to speak about our WIFI survey project in the Participatory Action Research course. Not only were the Red Hook youth able to experience a reality outside of their neighborhood, but MIT students learned from the visitors’ expertise in PAR and gained a critical perspective that was missing in the class. Moreover, the conversation that ensued from discussion after their presentation also served as a form of data for this project.

**Data Analysis**

I divided this project into three phases of research and analysis: 1) the Post-Disaster Community Media Typology; 2) In-Depth Case Studies; and 3) Outcomes of Community Media. Due to the lack of research on post-disaster community media, I chose to work inductively and form new theoretical propositions. I analyzed my data using grounded theory, which involves multiple rounds of coding content to systematically identify overarching themes (Corbin and Strauss, 2007).

**Phase 1: The Typology**

One of the aims of this dissertation was to conceptualize the digital strategies people use to communicate in the post-disaster context. The first phase of research aimed to answer the following questions:

1) How do people use information communication technologies (ICTs) to create community media in the aftermath of a disaster during recovery and rebuilding?
2) What are the various purposes of this community media?

To answer these questions, I investigated 42 different community media initiatives that emerged post-Sandy and post-Katrina. I ordered these initiatives using emergent codes from interviews and related media outputs following the “N of 1 plus some” approach. The “N of 1 plus some” approach recommends that in addition to focusing on primary cases, less in-depth secondary examples assist in developing deeper understandings of the primary cases (Mukhija, 2010). These less detailed examples allowed me to illustrate the contours of the different categories and confirm the generalizability of the Post-Disaster Community Media Typology. This aspect of the project aimed to uncover whether similar phenomena do exist with regard to communication, news-generation,
storytelling, and community in dissimilar places (from a global city such as New York City to a gulf south port such as New Orleans) after crisis.

Creating the Post-Disaster Community Media Typology was an iterative exercise in which I coded my data three different times. I always coded based on what seemed to be the prominent goal of the community media program. First, I coded my data after one month of fieldwork in New Orleans. I used those classifications to guide the uncovering of community media programs in post-Sandy when I was in New York City. Accordingly, I re-coded the data after I established which post-Sandy community programs I was studying. Then I returned to New Orleans to complete fieldwork, and finalized the codes (See Table 2.6). The main challenge of coding was differentiating between intended goals, along with intended and unintended outcomes, as well as distinguishing between actions versus products. The community media examples often displayed characteristics of more than one classification. It was nearly impossible to identify mutually inclusive codes. In all rounds of coding, I saw that over time, community media projects evolved and transformed, changing from one classification to another.

Table 2.6 Post-Disaster Community Media Typology Emergent Codes

<table>
<thead>
<tr>
<th>Round 1</th>
<th>Round 2</th>
<th>Round 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community-Controlled Communication Infrastructure</td>
<td>Emergency Communication</td>
<td>Resource-Sharing (Inform)</td>
</tr>
<tr>
<td>Citizen Journalism</td>
<td>Organizing</td>
<td>Bottom Up Journalism (Investigate)</td>
</tr>
<tr>
<td>Oral Histories</td>
<td>Human Connection</td>
<td>Organize for Place (Incite)</td>
</tr>
<tr>
<td>Participatory Documentation</td>
<td>Memory &amp; Identity Assertion</td>
<td>Crowd-Sourced Deliberation (Include)</td>
</tr>
<tr>
<td>Digital Deliberation</td>
<td>Digital Deliberation</td>
<td>Therapeutic Networking (Interact)</td>
</tr>
<tr>
<td>Media Literacy</td>
<td>Self-Determination</td>
<td>Memorialization (Interpret)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Economic Self Determination (Income-Generate)</td>
</tr>
</tbody>
</table>

Phase 2: In-Depth Case Studies

Once the Post-Disaster Community Media Typology was refined and completed, I then conducted in-depth case studies of 2-Cent Entertainment LLC and Red Hook WIFI. The purpose of the in-depth case studies was to understand how community media impacts individuals and communities and to shed light on the remaining two research questions for the project:

3) Does the grassroots use of ICTs in the post-disaster context lead to new forms of social relations and civic engagement in the digital era?

4) What are the benefits of community media and at what scales (individual, group, city-wide) do these gains manifest?
I selected 2-Cent Entertainment LLC and Red Hook WIFI for my in-depth case-studies because they both exhibited characteristics of each category from the typology, exemplifying the final classification of economic self-determination (income generate). Both cases also demonstrated multi-scalar benefits. As stated in Chapter 1, I wanted to focus on how marginalized groups in the most destroyed neighborhoods use community media to recover and rebuild in the city because disaster “resilience can only remain useful as a concept and as progressive practice if it is explicitly associated with the need to improve the life prospects of disadvantaged groups” (Vale, 2014, p. 191). I selected representative cases: members of 2-Cent Entertainment LLC and the Red Hook Digital Stewards are African-American and Latinx youth from some of the poorest census tracts and damaged neighborhoods in their respective cities.

To analyze these cases, I used the methodological framework of process tracing. “Process tracing gives close attention to sequences of independent, dependent, and intervening variables” (Collier, 2003, p. 823). The method helps establish rigor and comparability in cases that are non-controlled. It is used to trace the influence of one factor (in this research project, the creation and existence of community media) in different contexts. Detailed description of certain points over time are necessary to complete process tracing in order for causal inference. Using this technique, I was able to identify differing variables in the two cases that influenced the dissimilar trajectories of each program, and ultimately propose a theory about the multi-scalar gains of community media.

**Phase 3: Community Media Outcomes**

Understanding the multi-scalar gains of these community media projects was also an inductive process. In the same way that I coded the types of community media that emerge in the post-disaster context, I also used grounded theory to understand the outcomes of these projects. I utilized the in-depth case studies to define outcomes and focused on the below guiding questions during participant observation of and interviews with of 2-Cent and the Red Hook Digital Steward members:

- What were the goals of those who conceived of, initiated, and participated in the creation of the community media?
- How do the initiators of these community projects perceive outcomes?
- At what scale did the community media make a difference? Individual? Neighborhood? Larger non-spatial community? Citywide

Next, I confirmed my theory about the multi-scalar gains of community media by applying it to the 42 mini cases that were the basis of the typology.
Methodological Challenges, Limitation, and Reflections

One of the main limitations of this research was that I was the only coder of the data when developing the typology and theorizing the gains of community media. Unfortunately, I was not able to verify and test my coding assignment with other researchers. I presented preliminary versions of the typology in four different venues and received comments, which I did incorporate as I reiterated the classification. Another limitation of this study was the varying levels of access I had to 2-Cent Entertainment versus the Red Hook Digital Stewards. It was not possible to embed myself and conduct PAR with 2-Cent in the way I did with the Red Hook Digital Stewards. Rather than viewing this as a shortcoming though, I contend that my findings are stronger because of the unique position I had at the Red Hook Initiative. I relied more heavily on 2-Cent products, which told meaningful stories for analysis. Since Red Hook WIFI is an infrastructure, I did not have comparable products to study for that case.

Furthermore, since Katrina occurred more than ten years ago and because community media initiatives are sometimes short-lived, it was difficult to track down the creators specifically in New Orleans. In these situations, I analyzed the actual media products and consulted secondary research about the initiative if it existed. There were also instances when I would not be able to track down the community media of interest because of the transient quality of the Internet. The founder of the Internet archive site, Wayback Machine claims that the average lifespan of a webpage is 100 days before it is edited or no longer exists (Joyce, 2015). Journalist Cynthia Joyce explains in her anthology of Katrina blogposts, “…we are increasingly incapable of reconstructing our own past. Much of the collective digital diary of Hurricane Katrina has already been lost. At least a quarter of the leads I receive for this project were dead-ends, pieces you wouldn’t even know existed unless you specifically went looking for them” (Joyce, 2015, p. 18). In this study, employing the “N of one plus some approach” I complemented the less detailed initiatives with more expansive examples to answer the overall research questions and make sense of the in-depth case studies.

A final limitation of this research addresses the difficulties of interviewing individuals about a traumatic event in their life such as experiencing a natural disaster. My questions may have triggered unpleasant feelings and I tried to be sensitive and cognizant of this. Respondents may also have unreliable memories about these episodes in their life, but through triangulation of sources I aimed to verify information from interviewees.
Chapter 3
The Post-Disaster Community Media Typology

CHAPTER SUMMARY: The field of planning does not consider how grassroots digital media production is a form of public participation affecting the social, physical, and economic fabric of communities. This chapter first makes this argument and then reviews previous typologies from disparate disciplines regarding media effects, online activity, and public participation. Next, it presents the Post-Disaster Community Media Typology to characterize why people engage in digital activities after crisis: to inform, to investigate, to incite, to include, to interact, to interpret, and to income-generate. Each category is explored in-depth through post-Katrina and post-Sandy examples, and a brief synthesis of findings is presented per classification. The chapter then highlights overall patterns about how community media evolves and changes over time. Finally, the chapter identifies three multi-scalar gains of community media: recognition, instrumental capacity, and asset creation.

While the use of ICTs to facilitate participation in charrettes or deliberative forums (Talen, 1999; Eggers, 2007; Okolloh, 2009; Brabham, 2009) have been incorporated into scholarship and practice, very little research explores how those same digital tools influence media production and accordingly knowledge production as a proxy for or pathway to participation. This Post-Disaster Community Media typology provides a broader spectrum of public participation activities that are possible through ICTs, which planning scholars and practitioners can use to improve theory and design more suitable interventions.

Sandercock and Attilli’s (2010) book of essays Multimedia Explorations in Urban Policy and Planning: Beyond the Flatlands begins this investigation. They discuss how the beginning of an epistemological shift in planning occurred in the 1970’s when John Friedmann (1973) argued that there was a “crisis of knowing” because of the limitations of expert knowledge, which then led to the “story turn” in planning (Sandercock and Attilli, 2010). Since then, several planning scholars have been contemplating the relationship between story and planning (Forester, 1989; Mandelbaum, 1991; Marris, 1997; Sandercock, 1998, 2003; Eckstein and Throgmorton, 2003; Attilli, 2007). “These investigations highlight how planning is performed through stories, how rhetoric and poetics are crucial in interactive processes, how the communicative dimension is central to planning practices and how stories can awaken energies and imaginations...,” write Sandercock and Attilli (p. xxi, 2010). Their book emphasizes the value of multimedia storytelling as a means of facilitating dialogue and collaboration, but the essays do not define the ultimate motivations of makers and participants.

The typology highlights many organic, non-institutionalized activities (as opposed to structured charrettes, town hall meetings, or public participation events) that are not traditionally studied in the field of planning. Additional community media activities including – radio broadcasting, blogging, vlogging, social media activism, and mesh networking, among others – influence and redefine social and physical communities. Thus, the typology also points to new ways of understanding the multi-scalar outcomes of civic engagement via technology. Table 3.18 Outcomes of Community Media at the end of this chapter summarizes these impacts.
After collecting over 40 examples of community-based media that emerged post-Katrina and post-Sandy, I developed a *Post-Disaster Community Media Typology* based on the purposes and outcomes of these initiatives. Admittedly, there was a bias in my approach to collecting evidence about community media for this typology, as my analyses include positive forms of community-building or left-wing or radical acts of resistance. Given my networks and snowball sampling approach, I only had access to these projects as leads to right-wing community media did not prove to be fruitful.²²

I acknowledge that community media (post-disaster or not) can also exclude populations and elevate harmful racist, xenophobic, sexist, and homophobic agendas, as seen recently in this post-Trump Era (another type of disaster). Despite community media’s political values or leanings, I argue that the process of creating the content and the content itself, challenges the institutions that govern public knowledge. Therefore, the activities in this typology accurately describe the purposes and outcomes of all grassroots media activities.

**Previous Typologies**

Various typologies or classifications exist to help scholars and practitioners understand: media effects, online activity, and public participation, as well as how these three areas interact with one another. For example, Jacobs and Schillermans (2016) developed a typology to understand the ways in which digital and print media contribute to public accountability. They outline their theory as *sparks, triggers, amplifiers,* and *forums.* First, the media acts as a potential *spark* for accountability: if an organization knows they will be under a media spotlight, then people within the organization may preemptively review policies. Second, stories from the media may then *trigger* formal accountability processes. Third, the media is also an *amplifier* of accountability as it covers stories of formal reviews such as public trials or town halls. Lastly, the media is a *forum,* which reports critically on an organization in the absence of formal accountability processes (Jacobs and Schillermans, 2016).

Meanwhile, focusing on digital media specifically, Salavarria (2017) contends that online news can be categorized by several different variables. These include platform (specific device used to disseminate and consume), temporality (one time, periodic, constantly updated), topic (subject matter or content), scope (territorial interest), ownership (public, private, self-published), authorship (who created the content, which may or may not coincide with ownership), approach (process of

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²² When I tried to look for right-wing community media, some of my interviewees pointed me to conservative homeowner groups in Jefferson Parish. However, I was not able to find evidence that these groups were creating digital community media or schedule an interview with anyone who part of or represented the group. More recently, in 2016, a group that identifies with #MonumentLivesMatter in New Orleans formed in response to the #TakeEmDownNola activists who were fighting for the removal of three confederate statues across the city. I did not include #MonumentLivesMatter in my analyses since it was not a post-Katrina initiative.
creating content), economic aim (for-profit or non-profit), and dynamics (the amount of multimedia material).

Beyond digital media and furthering our understanding of digital space, Arora (2012) argues that people employ metaphors of physical space to make the “unknown” digital space “known” using terms such as *chatrooms*, electronic *frontiers*, *homepages*, or information *highways*. “Focusing on the spatial dimension emphasizes the importance of the underlying structure – its nature and design in shaping online social action” (Arora, p. 60, 2012). Yet these words do not actually situate emergent digital spaces in real-world infrastructures, which she does by offering a framework “that captures the cultural dimensions of new media spaces.” Her *Typologies of Cyberspace* shown in the table below (Arora, p. 60, 2012), demonstrate the different purposes of digital spaces and uses physical place metaphors to elucidate this.

Table 3.1 *Typologies of Cyberspace*

<table>
<thead>
<tr>
<th>Type of Space</th>
<th>Place as Metaphor</th>
<th>Virtual Space Issue / Focus</th>
</tr>
</thead>
<tbody>
<tr>
<td>utilitarian-driven</td>
<td>highways</td>
<td>Information infrastructures, digital divide, online traffic, virtual communities, shared space, convergence</td>
</tr>
<tr>
<td>aesthetic-driven</td>
<td>homes</td>
<td>Customization, personalization, ownership, taste, private vs. public space</td>
</tr>
<tr>
<td>context-driven</td>
<td>parks</td>
<td>Cyber-leisure, social network sites, situated activity online; gendering online space; online pluralism</td>
</tr>
<tr>
<td>play-driven</td>
<td>playgrounds</td>
<td>Engagement, interactivity, corporate blogging, work-play, hard play, gaming</td>
</tr>
<tr>
<td>value-driven</td>
<td>museums</td>
<td>Emotion, affective spaces, nationalism and online tourism, digital flaneur and browsing, politics of information</td>
</tr>
</tbody>
</table>

Source: This table was taken from Payal Arora’s *Typology of Web 2.0 spheres: Understanding the cultural dimensions of social media spaces* (2012. p. 607)

Lastly, planners and policymakers have grappled with how to understand and classify public participation and engagement (in-person and digital). The 1966 Model Cities Program aimed to combine urban renewal with the War on Poverty, and provided institutional avenues for participation. These events inspired Sherry Arnstein’s ground-breaking concept, the *ladder of participation* (1969), with rungs from manipulation to informing to consultation to partnership, and viewed citizen control as the most meaningful form of participation. Sherry Arnstein served as the
chief citizen participation advisor to the Model Cities Administration at the time her article was published in 1969. She states, “...there is a critical difference between going through the empty ritual of participation and having the real power needed to affect the outcome of the process” (Arnstein, 1969, p. 216). Building off of Arnstein’s ladder, the International Association for Public Participation (IAP2) Federation developed a popular spectrum to define levels of civic engagement including inform, consult, involve, collaborate, and empower (IAP2 International Federation, 2014). Though the spectrum has been criticized for vague definitions of its terms (Susskind, 2008).

Bratt and Reardon (2013) respond to Arnstein’s ladder arguing that participatory democracy can take shape even when not initiated by a governing body. The authors suggest that the ladder of participation needs to contain more categories that reflect direct bottom-up resident strategies, indirect bottom-up resident strategies, and professional roles in support of participatory democracy. In their article, A Typology of Public Engagement Mechanisms, Rowe and Fewer (2005) differentiate between public communication, public consultation, and public participation based on the nature and flow of information between organizations and individuals. Similarly, Farrington and Bebbington (1993) use a graph to demonstrate the tradeoff between depth (degrees of involvement) and breadth (inclusion versus exclusion of participants) in many public engagement efforts. These existing models to understand participation in planning ignore community media initiatives, which are forms of participation and citizen engagement beyond the classic structured town hall meeting, charrette, or simulation (Sandercock and Atilli, 2010).

The Post-Disaster Community Media Typology

This Post-Disaster Community Media Typology combines ideas about the role of the media, the uses of digital space, and types of participation to explore how and why people use old and new technologies and platforms to communicate with one another, tell their stories, and engage in civic life in the aftermath of a disaster. The community media initiatives I studied often aimed to hold an authority accountable in the ways Jacobs and Schillermans (2016) describe. The various projects differ across platform, temporality, topic, scope, ownership, authorship, approach, economic aim, and dynamics as Salavarria (2017) outlined.

Lastly, while Arora’s (2012) typology refers to the Internet, the types of spaces she describes can also extend to other types of platforms. The community media examples I draw from range from radio and Wifi infrastructures (utilitarian-driven) to visual narratives and videos (aesthetic-driven) to social networking sites (context-driven) to crowdsourcing apps (play-driven), and to investigative blogging (value-driven). However, none of these typologies focus on crisis situations or take into account the different ways individuals produce and consume facts and information that facilitates survival and resilience, as well as shapes the public’s understanding of a situation.
Each example of post-disaster community media is a form of information sharing and participation, but the typology’s objective is to help readers understand the purpose, evolution, and impacts of these digital, tech-based activities. The typology is important because it points to examples of civic engagement and public participation that the field of planning tends to overlook or ignore. Planners should pay attention to how community media can act as a bridge to the constituents they aim to serve, and also how it affects the social and physical spaces they aim to improve.

I have identified seven types of community media that emerge in the post-disaster context: 1) Inform: Resource Sharing, 2) Investigate: Bottom-Up Journalism, 3) Incite: Organize for Place, 4) Include: Crowd-Sourced Deliberation, 5) Interact: Therapeutic Networking, 6) Interpret: Memorialization, and 7) Income-Generate: Economic Determination, all of which are explained in Table 2.2 (below), and in detail throughout the chapter. The categories are ordered in this way because the “primary actions” build upon one another to some extent (see typology below). For instance, one cannot “incite” without the ability to “investigate” or “inform.” The seventh primary action “income generate” encompasses the six other actions. It is not necessary for each primary action to encompass every single preceding action, but as one moves down the list, there is a clear increase in the complexity of the community media type.

These categories are not mutually exclusive and a community media project may fall into more than one. Also, several projects move between categories over time as the initiative grows or changes. The community media I observed were started by either individuals, informal collectives representing a particular group identity, non-profit organizations, or government agencies. While none of the initiatives started in the private sector, some of them did eventually turn into corporate endeavors. The community media I observed also had two types of communication: internal and external. Internal refers to when the media is intended for the producer’s community (defined either through a shared identity, spatially, or both) whereas external refers to when the media is intended for a public outside the producer’s community. The following mini cases detail these aspects and illustrate the seven categorizations.
<table>
<thead>
<tr>
<th>Primary Action</th>
<th>Community Media Type</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inform</td>
<td>Resource Sharing</td>
<td>To give someone facts or information</td>
</tr>
<tr>
<td>Investigate</td>
<td>Bottom-Up Journalism</td>
<td>To carry out a systematic or formal inquiry to discover information or examine the facts</td>
</tr>
<tr>
<td>Incite</td>
<td>Organize for Place</td>
<td>To move facts or information to action; stir up; spur on; urge on in a certain geography</td>
</tr>
<tr>
<td>Include</td>
<td>Crowd-Sourced Deliberation</td>
<td>To gather and discuss facts or information</td>
</tr>
<tr>
<td>Interact</td>
<td>Therapeutic Networking</td>
<td>To support one another emotionally using facts or information</td>
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<tr>
<td>Interpret</td>
<td>Memorialization</td>
<td>To explain or tell the meaning of facts or information for present and future audiences</td>
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<tr>
<td>Income-Generate</td>
<td>Economic Self-Determination</td>
<td>To create a livelihood from the creation and dissemination of facts or information</td>
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**Inform: Resource-Sharing**

This refers to information-sharing in which the broadcaster is giving important data about available resources for a specific community as well as garnering resources from a larger public for members of that specific community. During and after Katrina, this was most common through low-powered FM radio\(^{23}\) whereas during and after Sandy, this was most common through localized wireless mesh networks and social media.

For example, Katrina, WQRZ-LP\(^{24}\), a non-profit, low-power FM radio station based in Bay St. Louis, Mississippi, was one of only four functioning radio stations between Mobile, Alabama and New Orleans, Louisiana. While other local media outlets went off the air during the storm, this station provided vital emergency communication for area residents. Initially the station served a 4-mile radius, and then the Federal Emergency Management Agency (FEMA) assisted the grassroots effort and worked with the Federal Communication Commission (FCC) to increase its signal transmission to thirty miles. FEMA distributed approximately 3,500 radios to survivors that could access the station. Managed and run by Hancock County residents, WQRZ-LP continued to serve as a trustworthy source of information about shelter, first aid, food, and administrative FEMA and other agencies’ paperwork for nearby neighborhoods for two years after the storm.

Another example includes Viet Radio, a low-powered FM station serving a Vietnamese community in New Orleans East. Vuong Ky Son founded and still manages Viet Radio in the ethnic

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\(^{23}\) Local radio provides a forum for important place-based information such as public events, safety protocols, protests, ballot initiatives, environmental concerns, social service opportunities, or news about local officials, among other types of information. Since 1934, the Federal Communications Commission (FCC) has been the sole regulator and allocator of the electromagnetic spectrum needed for transmitting anything over the air in the United States. Similar to many issues in the field of urban planning, electromagnetic spectrum is about the equitable allocation of a public resource and a vague definition of a public interest. In the 1980s and 1990s, a movement promoting citizen access to the airwaves emerged because in 1978, the FCC ceased to administer non-commercial, low-wattage licenses to not-for-profit educational and community groups. Then the Telecommunications Act of 1996 permitted entities that owned radio stations to consolidate, allowing unlimited ownership of stations across the nation. In January 2000, the FCC adopted low-powered FM (LPFM) radio licenses, intended for non-commercial operations for high schools, labor unions, places of worship, or non-profits. Low-powered FM stations are commercial-free, operate at a maximum of 100 watts, and provide coverage for three to five miles. However, just months after Congress adopted LPFM, they enacted the Radio Broadcasting Preservation Act, which forced the FCC to adopt exorbitant protection standards such as complicated paperwork and legal fees, for LP-FM stations because of push back and protests from large commercial broadcasters. After a decade-long battle between national radio industry trade associations and a coalition of radio and media activists, on January 4th, 2011, President Obama signed into law the Local Community Radio Act that loosens restrictions in obtaining a local non-commercial broadcast license. This battle was one about whose voice could and should be heard and whose voice would not be heard (the community radio stations that were active post-Katrina played an especially big role in this movement). As of 2013, over 2,800 applied for new low-power FM licenses in major urban areas. Currently, there are about 800 low-power FM station on the air (Prometheus Radio Project).

\(^{24}\) WQRZ-LP is also known as Hancock County Amateur Radio Association.
enclave. He was also connected to other Vietnamese radio disc jockeys (DJs) across the United States, which allowed information to travel beyond New Orleans and helped evacuees stay in the know about their neighborhood and even maintain a sense of community while in other places. Before the storm, only elders listened to the station and after the storm, listeners were more varied in age for a few months, but currently only older generations tune into the station (Personal Interview, Tuan Nguyen, 2016).

Similarly, after Superstorm Sandy, members from the Occupy Wall Street movement used their social media channels, mostly Twitter and Facebook, to tap the activist network for volunteers and aid. Within 24 hours, a volunteer army of young, educated, tech-savvy individuals with time and a desire to help others emerged. According to the Department of Homeland Security, at its peak, the network engaged approximately 60,000 volunteers (The Resilient Social Network, 2013). They employed the hashtags #SandyAid and #SandyVols, which allowed anyone on these platforms to access and contribute to the shared information.

Table 3.3 Resource-Sharing Examples

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<thead>
<tr>
<th>POST-KATRINA</th>
<th>POST-SANDY</th>
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<tbody>
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<td>Vietnamese Radio</td>
<td>Red Hook WiFi</td>
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<td>Katrina Radio (WQRZ)</td>
<td>Red Hook Twitter</td>
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<td>Common Ground Pirate Radio Station</td>
<td>Resilient Networks NYC</td>
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<td>Katrina Aftermath Radio Project (KAMP)</td>
<td>Occupy Sandy Social Media</td>
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<td>Radio Hope</td>
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Table 3.4 Timeline of Resource Sharing Examples Post-Katrina

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<td>KATRINA RADIO, HANCOCK COUNTRY AMATEUR RADIO (WQRZ-LP)</td>
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<td>COMMON GROUND PIRATE RADIO STATION (RADIO ALGIERS)</td>
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<td>KAMP - (KATRINA AFTERMATH RADIO PROJECT)</td>
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<td>RADIO HOPE</td>
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**Post-Katrina**
All of the post-Katrina examples in this category are low-powered FM radio stations that either existed before the storm and were crucial communications tools in the aftermath, or formed shortly after the disaster to address urgent information exchange needs. In her book, *Low Power to the People*, Dunbar-Hester (2014) chronicles the history of LPFM activism from 2003 to 2007, and conceptualized radio activists as “propagators of technology.” She writes (p. xi), “Propagation was an act of knowledge production; in the radio activists’ imagination, it produced not only hardware, but social relations.” These radio activists were especially interested in propagating an understanding of ICTs that emphasized localism or community-scale purposes, which starkly contrasts the Federal Radio Commission’s original interpretation of long-distance broadcasting in the 1920s-1930s, as well as today’s global reach of the Internet (Dunbar-Hester, 2014). LPFM activists believe that individuals should have the right to share information about local problems through the media. LPFM radio addresses this compelling need.

Since Katrina, LPFM advocates have focused on the importance of local reporting in disaster situations. The Prometheus Radio Project, a group of media activists founded in 1998 to fight for legal community broadcasting, told the House of Representatives’ Subcommittee on Telecommunications to expand LPFM in the 2006 House of Representatives Warning, Alerts and Response (WARN) act:

> Across the Gulf Coast and in countless other situations across the country, locally owned, volunteer-run community radio stations like LPFMs have been the difference between life and death, safety and danger for local communities. Stations like WQRZ-LP, a low power station in Bay St. Louis, Mississippi, were perfectly placed to give neighborhood-by-neighborhood coverage of the damage of Hurricane Katrina and Rita, and to help those communities know exactly how to interface with local and federal safety and health officials after the storms.

> But these stations are few and far between – limited from thousands more towns and neighborhoods by an out-of-date law limiting low power to small, remote communities. If Congress moved to expand low power FM radio to thousands more towns and cities across this country, these communities would enjoy a reliable and well-understood local technology when disaster struck (Dunbar-Hester, 2014, p. 144).

The LPFM activists and groups such as the Prometheus Radio Project asserted that consolidated broadcasters were not well-equipped to provide disaster coverage or local, up-to-date information because staffers were not always familiar with the areas of interest. LPFM advocates recommend that safety and law officials form partnerships with LPFMs in which local broadcasters with an intimate knowledge of the area could be available at the station during an emergency. This
perspective on disaster preparedness and LPFM operators in the 1940s. Ham radio operators offered to announce public alerts or broadcast vital information for “citizens’ defense” during WW2 (Dunbar-Hester, 2014). The below examples of LPFM radio demonstrate how critical this platform was for providing facts and information to local audiences, and for facilitating resource sharing in times of emergency in the Gulf during and after Katrina.

1. **Vietnamese Radio**

   The Vietnamese enclave of Versailles is a neighborhood of Village de L’Est in the remote eastern corner of the city (New Orleans East) that was extensively flooded. Versailles is geographically isolated, and before the 1960s, was a swampland. Residents moved to the area during the 1960s after the Army Corps of Engineers built what was believed to be an effective system of levees.

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Figure 3.1 *New Orleans Neighborhoods & Village de L’Est Maps*

![Map of New Orleans neighborhoods with Village de L’Est highlighted in purple.](image)

*Source: New Orleans City Planning Commission (Left)*

*Source: The Journal of American History, 2007 (Right)*

*The City almost placed a landfill in the neighborhood after Katrina, which is discussed in more depth later in the chapter*

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Ham radios are also known as amateur radio, and this describes the use of radio frequency spectrum for purposes of non-commercial exchange of messages. National governments regulate technical and operational characteristics of transmissions and issue individual station licenses and prospective amateur operators are tested for their understanding of key concepts electronics and the host government’s radio regulations.
In 2005, approximately 7,000 Vietnamese Americans lived in New Orleans East before Hurricane Katrina, and within two years of the storm, ninety percent of the Vietnamese community in the neighborhood had returned (Li, 2011). While media portrayals of African Americans ranged from victims to looters to violent criminals, New Orleans’ Asian population was invisible in mainstream news. Despite the widespread impact of Katrina on Asian Americans (approximately 14,000 Vietnamese Americans lived in the New Orleans metropolitan area) and their unique challenges following the storm, the media coverage of these groups was rare or focused on “model-minority” stories (Personal Interview, Tuan Nguyen, 2016).

The language barrier was one of the biggest obstacles Asian Americans faced when returning to their neighborhoods, and this was especially true in New Orleans East. Similar to other Gulf Coast residents, Asian Americans also lost their homes, businesses, and livelihoods, but those with limited English proficiency faced obstacles in securing appropriate social services. A majority of displaced Asian Americans found temporary housing with relatives, friends, or other Asian-American volunteers. The problem with this is that FEMA then deemed these displaced residents to be in “permanent housing” making them ineligible for housing help. Because Vietnamese Americans were largely absent from shelters, this demographic remained invisible to government agencies (Li, 2011).

Two new non-profits, the Mary Queen of Vietnam Community Development Corporation (MQVCDC) and the Vietnamese American Youth Leaders Association (VAYLA) formed in 2006 shortly after the storm to address some of these challenges, increasing the total number of non-profit organizations in the area to three. (Before Katrina, the only non-profit organization that existed in New Orleans East was Viet Aid, a social service organization founded in 2001.) The story of the Vietnamese community in Versailles has been extensively studied and analyzed by scholars, journalists, and filmmakers because it is a case of how a community successfully rebuilt their own neighborhood and redefined itself by demanding government attention (Seidman, 2013).

“I know this sounds really strange, but Katrina for us in many ways was a good thing. It galvanized the people. We have a sense of who we are, or who we could be,” said Father Vien Nguyen, the head pastor of the Mary Queen of Vietnam Church and a prominent community leader in Versailles (A Village Called Versailles, 2009). And as legal scholar Bethany Li asserts, “The Vietnamese community in Versailles gained control of their community because it insisted on being seen and heard” (Li, 2011, p. 25 – emphasis added). How did the Vietnamese community stay intact figuratively in order be seen and heard and preserve their neighborhood physically?

Versailles’ residents evacuated to different cities all over the country, but Lafayette, Dallas, Houston, San Antonio, Austin, Fort Chaffee, Little Rock, and Southern California were especially popular destinations. Houston was the most important destination because it is home to approximately 55,000 people of Vietnamese ancestry (Airriess et al, 2008). Despite being miles away from home in New Orleans, Versailles’ residents managed to keep in contact through informal networks of friends and relatives, broadcasts from various local Vietnamese radio stations in the different cities where evacuees resided, as well as visits from church leaders (Li, 2011). “Before and
after the storm, technology played a small role in how people from this neighborhood communicated with one another except for the telephone of course and low wave radio,” stated Tuan Nguyen, the current Executive Director of the Mary Queen of Vietnam CDC.

Vyong Ky Son operated Viet Radio out of his garage in Versailles, and the station had a range of approximately five miles. The low-powered FM radio station was very popular among the neighborhoods’ elders and first generation residents before and after Katrina. “I did not know about this radio station until after the storm. I didn’t listen to it ever, but my parents listened regularly after the storm,” said Tuan Nguyen who grew up in New Orleans East. This was a common sentiment among second-generation Versailles residents, who reflected, “Now, the second generation and members of VAYLA use a lot of social media to connect with the youth” (Personal Interview with Huong Nguyen, 2016).

All of Vyong Ky Son’s programming was in Vietnamese, and he continued to broadcast from the Mary Queen of Vietnam Church once he returned to New Orleans. He would report where there was damage in neighborhood, who was still around, as well as where different types of help and resources were available. Vyong Ky Son also had personal relationships with other Vietnamese DJs that managed Vietnamese radio stations in cities across Louisiana, Arkansas, Texas, and California, among others. He would relay facts via phone to the Vietnamese radio DJs in other cities, who would then transmit and obtain information for evacuees. It was through this distributed network of Vietnamese radio DJs that the Versailles community was able to stay intact and connect to resources (Personal Interview with Tuan Nguyen, 2016).

For example, MQVN’s pastor and Vyong Ky Son had contacted the Saigon Radio station in Houston to share that while most Vietnamese had evacuated before Katrina’s landfall, many sought sanctuary in the Mary Queen of Vietnam Church (approximately 300 individuals). This message was then sent from Houston to the Radio Saigon station in Orange County, California. On September 1st, three days after Katrina made landfall, a Vietnamese American woman in Arlington, Texas who heard the radio broadcast was able to contact her mother’s friend in Versailles by a land line to learn of the condition of this stranded population. She then fed what she learned back to Saigon Radio in Houston and Orange County (Airriess, 2007).

Vyong Ky Son also told the Vietnamese DJs in other cities to encourage inhabitants to open their doors to displaced Vietnamese New Orleanians needing temporary shelter. In Houston, after the local Vietnamese DJ broadcasted this need on Saigon Radio, displaced New Orleans Vietnamese families in the city convened at the Hong Kong 4 shopping center and Houston Vietnamese families drove by holding up fingers indicating how many people they could accommodate. This system was mostly coordinated through radio.

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26 I was not able to identify when Vyong Ky Son returned to New Orleans after Katrina, but several informants said “soon after.”
Mary Queen of Vietnam’s church-based social capital intersecting with ethnic media at the national scale provided a distinctive form of network benefitting evacuees in Houston through information-sharing. MQVC’s first parish priest was appointed in 2003 as a supporting bishop of Orange County, California (also known as the Vietnamese capital of America). After Katrina, he visited Orange County’s Little Saigon Radio and asked listeners for donations to assist displaced New Orleanians and in particular evacuees in Houston (Airriess et al, 2008). Ethnic media “within the larger ‘disaster network,’ rescaled the relief effort through the construction of a ‘virtual community’ based on shared identity” (Airriess et al, 2008, p. 1339).

Additionally, Li (2011, p. 32-33) describes how Father Vien Nguyen made use of the distributed radio network:

Prior to evacuating himself on Friday after the storm, Father Vien rode around on a boat taking pictures, knowing that rumors were rampant and people were anxious for information. Before each stop, Father Vien would call the local Vietnamese radio station to announce his arrival. During each stop he would update people there, take pictures of them, and show pictures taken earlier to people at each subsequent location. In these ways, the Vietnamese residents of Versailles stayed in touch with each other even during the evacuation.

In Chapter 1 of the dissertation, I discussed Ball-Rokeach’s storytelling networks, which is a neighborhood based communication infrastructure. Viet Radio shows that storytelling networks can exist outside the physical neighborhood in non-spatial communities too.

2. Katrina Radio (WQRZ-LP)

Brice Phillips of Bay St. Louis, Mississippi (and also the epicenter of hurricane damage) founded the Hancock County Amateur Radio Association (HCARA) in 1994 in order to create a public safety resource for the area and also to organize the disabled residents in his county to run the LPFM station, WQRZ. Phillips could not serve in the military due to his Attention Deficit Disorder (ADD) diagnosis, and wanted to give others with disabilities an opportunity to contribute to their community by creating the station (Byrum, 2005). The station serves Bay Saint Louis, Waveland, Diamondhead, and Kiln. HCARA provides engineering training to members, and offers airtime to anyone running for local office or any local musicians. The Hancock County Amateur Radio Association’s mission statement reads:

HCARA, Inc. was organized in 1994 to provide a service to the community through the education, promotion, and encouragement of training for Amateur Radio Service operators, the promotion of emergency disaster preparedness in the community, promotion of good community relations, promote community service volunteerism and to make resources available to concerned organizations in the case of national or local emergency.
The studio computers have a rolling screensaver that states: “Communication is the Key that Binds Community Together” (Byrum, 2005).

After Katrina hit the Gulf South, listeners began referring to WQRZ-LP as Katrina Radio. As Katrina approached Hancock County, Phillips packed his van with transmitters, ham radios, multiple extra antennas, and other back-up equipment that his station would require to survive the storm. He relocated into the Hancock County Emergency Operations Center in Bay Saint Louis and broadcasted emergency information that staff at the center generated. Since 1996, Phillips has had a strong relationship with the Hancock County Emergency Operations Center27, which is dedicated to providing protection for the health, safety and welfare of the residents of the county through “effective contingency planning, disaster event coordination with local and state agencies, all hazards public education, disaster training and exercise for emergency responders.”28

While the Hancock County Emergency Operations Center building was 28 feet above sea level, Phillips was able to broadcast from the second floor until the storm’s surge waters rose that high too. For this reason, broadcasting stopped for a few hours as he moved to higher elevations on top of the building. A WQRZ supporter wrote in a letter to FEMA requesting funds for the station:

His station was the only mass communications system to survive, and the only voice the Hancock County Emergency Operations Center could use to direct survivors to relief supplies, food, water, ice, Red Cross, medical and rescue sources (Prometheus Radio Project, 2005).

FEMA credited the WQRZ-LP station with convincing people to evacuate through constant warning broadcasts. As stated in the quote, Phillips was the only radio DJ on the air during and immediately after Katrina in the Gulf South. For several months after the storm, WQRZ-LP continued to reconnect lost family members and friends, provide information about recovery efforts, and gave FEMA representatives and first responders a channel to speak directly to the community. In 2006, a delegation from Japan’s Great Hanshin-Awaji Earthquake Memorial Disaster Reduction and Human Renovation Institutions visited Brice Phillips in Mississippi to study his method for providing public information in support of disaster management centers (Byrum, 2005).

3. Common Ground Pirate Radio Station (Radio Algiers)

Malik Rahim, a local community organizer in New Orleans and a former Black Panther was one of the founding members of Common Ground Collective in the Algiers neighborhood. The group was formed just days after Katrina on September 5th, 2005. The main purpose of the organization was the delivery of basic supplies such as food and water to residents that stayed behind in predominantly African-American neighborhoods including Algiers, the 7th, 8th, and 9th wards. Eventually, the

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27 Run by the local government, an emergency operations center (EOC) coordinates the request for and deployment of outside resources, and activated local emergency plans if they exist.

28 Hancock County Emergency Management: [http://hancockcountyms.wixsite.com/emergencymanagement](http://hancockcountyms.wixsite.com/emergencymanagement)
Common Ground Collective even started a health clinic when four volunteer street medics arrived in Algiers after Katrina, and rode their bicycles around the neighborhood to see if residents needed medical attention.

In his book, *Down in New Orleans: Reflections from a Drowned City*, Billy Sothern (2007) describes the Common Ground Relief Collective:

Like the other large charity groups working in the city, Common Ground has attracted tens of thousands of volunteers from around the country to gut homes, clean up neighborhoods, and attempt to assist residents recovering from Hurricane Katrina. Unlike most other organizations, however, Common Ground has a decidedly counterculture front, attracting mostly white progressives from across the country, including leftists, hippies, radicals, anarchists, and punks (p.274).

During the first week of September, Rahim sent an e-mail to the IndyMedia activist list serve (which included many white progressives from across the country) describing the situation in New Orleans and the dire need for volunteers, aid, and help. This is how media activist and radio producer Jenka Soderberg became involved with the Common Ground Relief Collective. She recalls reading Rahim’s e-mail that explained how the corporate media’s post-Katrina story about the storm was all wrong. He said that the government did not have anything in control and minorities were not making the city more dangerous, but needed immediate help. (Personal Interview with Jenka Soderberg, 2016). After reading Rahim’s e-mail, she contacted one of her mentors, Reverend Lucius Walker with Pastors for Peace in Bronx, and together they organized a caravan of volunteers and supplies to drive to New Orleans. She left within a day of receiving Rahim’s e-mail, and arrived in the city just seven days after the storm.

According to Soderberg, when she started asking the residents in Algiers who did not evacuate what they needed most, they told her it was difficult to figure out what was going on in the city and where to go for help. “When I got to Malik [Rahim]’s, I had experience setting up pirate radio stations in South America where there were trade convergences and where I was doing protests. And all of the FM stations in New Orleans were playing the same canned content because the corporate radio stations banded together and made a unified broadcast from Baton Rouge, but there was actually no emergency communications.”

While Soderberg criticizes the corporate radio stations for their unhelpful broadcasts, other media scholars have discussed the success of the United Radio Broadcasters of New Orleans, who were mostly local radio hosts dedicated themselves to sharing urgent, around the clock emergency information (Moody, 2014).29 “We wanted our listeners to have as much information as possible, and

29 Clear Channel Radio was the owner of 6 FM station in New Orleans focused mainly on entertainment. Entercom, a competitor of Clear Channel Radio owned the popular WWL AM news station in the city. It was the only all-news outlet in the city, and the flagship station of a cluster of AM stations. After Katrina, competitors Clear Channel and Entercom joined together to form the United Radio Broadcasters of New Orleans.
decided the best way to provide that was to work together,” stated Dick Lewis, the regional Vice President of Clear Channel at the time (Moody, 2014 p. 167). “We were the stage, the platform, the lifeline for local officials, breaking news, local press conferences, the voice of the voiceless, the voice of authorities trying to reach them, the voice of family and friends worried about loved ones,” said Diane Newman, WWL operations manager in a testimony to the FCC (Moody, 2014 p. 161). Still, Soderberg argues that not all residents were represented or benefitted from these particular broadcasts. This could be because the broadcasts were coming out of Baton Rouge, and not from people on the ground in New Orleans.

Because Rahim had initially e-mailed an IndyMedia list serve for help, several volunteers that arrived in Algiers were media activists. “Someone brought some radio equipment from Portland and someone brought some radio equipment from Oakland, and I brought antennas and transmission equipment,” explained Soderberg. Within two weeks of arriving, she set up a pirate radio station in a wooden garage in the backyard of Rahim’s home in Algiers. The goal of the radio station was essentially to let people know where FEMA centers and Red Cross centers were located, where supplies could be obtained, and what to do for survival. There were many public service announcements about toxins in the water and managing the extreme heat or avoiding an influx of diseased mosquitoes.

Journalist Gary Rivlin (2015) states in his book *Katrina: After the Flood*, “…no group matched Common Ground and the breadth of services it offered. People were concerned about the poisons the floodwater left behind, so Common Ground started a toxins-testing service and gave away red worms and plants that help leach harmful chemicals from the soil. The group created a pest-control unit and launched a pirate radio station dubbed Radio Algiers (“reporting from the West Bank of Occupied New Orleans”) (p. 276).

The station reached the 7th, 8th, and upper 9th wards, and even some parts of the French Quarter. After running for approximately a week, Soderberg had to change the location of the station to a private home in the 8th Ward because an FCC official tracked Common Ground Collective’s illicit broadcast and threatened to fine them for these activities. The group was not able to apply for a LPFM license because they missed the small window of time when this was possible to do so (Soderberg, 2016). In a time of crisis, why was the state unwilling to supply the group that was completing necessary relief work with a license? Perhaps the mainstream media images of chaos and lawlessness (discussed in Chapter 1) had permeated the minds of officials who wanted to follow strict rules and maintain order.

With time, the Common Ground Pirate Radio Station became more sophisticated. While mostly white volunteers who knew about radio ran the broadcasts, African-American teenage residents in the 8th Ward began learning about pirate radio and would help manage the station for a few hours each day. Common Ground Collective eventually put out a phone number for people to call if they had questions, and knew their radio station had listeners because they received several phone inquiries a day. When the station shared information about where to get food or supplies, the
people that showed up said they learned about the opportunity through the radio station (Flaherty, 2009).

Access to computers and Internet was a very critical for months after the storm because FEMA required several different types of codes, numbers, and forms to receive benefits. People often came to Common Ground looking for computers and Internet access. Using donated computers, the organization built community tech centers for people to use in Algiers as well as the 7th, 8th, and upper 9th wards. Providing people with Internet access quickly became a priority for the group too. One volunteer brought routers with him to build a point to point mesh network. Mesh wireless systems offer multiple points of connection to the network. Soderberg and others set up 15 routers across the 7th, 8th, and 9th wards and in Algiers providing free Internet from the connection at Rahim’s home to those who had a device to log onto the network. This network lasted four months as it was difficult to maintain. And, as power came back to the city, there was less of need for the service.

While the computer labs and mesh network were up and running, volunteers were able to use these tools to run the pirate station more efficiently. For example, broadcasts from the station would also be streamed through the Internet, allowing those beyond the affected neighborhoods and New Orleans to access the information. The audio was also posted to the Indy Media site. As shown in Chapter 2, the social media landscape was underdeveloped at this time so this type of transmedia networking was especially novel. Many different volunteers, community organizers, media activists, and New Orleans residents came together around the operations of the radio station. Soderberg recalled, “It wasn’t just that we had a radio station. It was a radio station in the midst of a relief organization. And friendships emerged from that radio station.”

4. Katrina Aftermath Radio Project (KAMP) – 95.3 LPFM

The Katrina Aftermath Radio Project (KAMP), also known as Dome City Radio since it was based in the Houston Astrodome, provided critical information to Katrina evacuees about where to get basic amenities like food and water, how to enroll children into school, and how to navigate complicated paperwork (Prometheus Radio Project, 2005). Independent media producers were asking themselves, “How do we use our skills to help Katrina evacuees?”, and had the idea for the station after interviewing evacuees in the Astrodome and asking what they needed. It was clear that there was a desperate need for information and the better circulation of facts. “People were lost and confused and just had no idea what was happening. Radio really is the people’s medium because you don’t need to be literate,” explained a media activist in a Sprouts radio interview about the initiative (KAMP, Sprouts Broadcast, 9.21.2005).

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30 Point to point mesh will be discussed more extensively in the below subsection presenting post-Sandy examples.
The radio station was a joint endeavor among Houston Independent Media Center, Houston Pacifica Radio (90.1), and Prometheus Radio Project. At first, FEMA officials did not allow anyone who was not an evacuee to access the Astrodome for “security concerns.” (Ferguson, 2005). After navigating the FEMA red tape, the FCC granted a group of independent media activists and members of the Prometheus Radio Project, a license for a 30-watt transmitter outside the Houston Astrodome. These activists included Trish Stringer, a teacher at Rice University; Renee Feltz, the News Director at the Pacifica station; and Hannah Sassaman, a program coordinator of Prometheus Radio Project. On September 6th, 2005, the low-powered FM station went on the air when a remaining 3,760 NOLA evacuees were still in the Houston astrodome complex. KAMP ran for 24 hours over four days and producers interviewed individuals searching for family members and other resources. Evacuees heard about KAMP as FEMA officials and other first responders distributed thousands of donated radios to evacuees. The brief media project purportedly fostered short-term ties among people in the dome, and assisted with emergency response (Personal Interviews with Stringer, Feltz, and Sassaman, 2016).

On September 7, 2005, Singer explained the situation at the Astrodome on a Democracy Now! Interview:

...it was really clear that communication and information was a pressing need. Communication as a human right was an issue and people had no information about the location of their loved ones. There was a real difficulty getting information for basic things like when to eat, where to eat, how to get my child into school, how to look for jobs, transportation — really basic issues. There was no circulation of information going on in the early stages. Media activists in Houston talked about this
and decided really radio would be the perfect medium to address this. We started talking to Prometheus Radio Project about how we should go about doing this as a microradio. We decided to apply to the FCC for legal local low power FM, which they granted really quickly, within a day.

One of the visions of the radio station was to record and archive the audio broadcast over KAMP so that other community radio stations in the country could play these recordings and people could hear the voice of their loved ones and know how to contact them or where to find them (though this did not end up happening). “It is important for people to realize that this station is part of a movement of self-determination,” stated Sassaman during the Democracy Now! interview after citing research from the Youth Media Council that only 22 out of the 1,300 stories between August 29th and September 6th on CNN, MSNBC, and Fox had focused on the race and class issues inside evacuee shelters post-Katrina.31

5. Radio Hope
Blessings for Obedience is a ministry based in Midland, Texas, and has been involved in disaster relief efforts for the last thirty years. After Katrina, the ministry asked Galcom International, an organization that provides solar-powered radios to missionaries, for a donation of 1,000 little radios, because the ministry wanted to launch an LPFM station in New Orleans. Their goal was to help spread information about relief and coordination efforts in the immediacy of the storm.32 It turned out that the ministry actually had 1,000 radios pre-tuned to 107.9 MHz that were supposed to go to civil war refugees in Sudan, but due to political complications, never made it there. Hard coding the radios meant that listeners could not use the radios to listen in on any other channels including other micro-broadcasters or the commercial stations.

Right after Katrina, the ministry contacted the FCC during an open application window to request an STA (Special Temporary License) permit for 107.9, which was granted within two days. During the first week of September, a team of five volunteers from the ministry, including a radio engineer, packed up a vehicle with relief supplies and radio equipment, aiming to set up their station in New Orleans.

The Friendships Ministry in Gretna, Louisiana dispatched one of their relief vessels called “Hope” across the Mississippi River in Gretna, Louisiana. Blessings for Obedience housed their LPFM station inside “Hope.” People could access the station within 15 miles of “Hope” in all directions. In a Prometheus Radio Project testimony to the FCC, Kelly Coleman of Blessings for Obedience, stated:

We broadcast information on where victims could pick up food

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31 I tried to access this report, and called the Media Justice Center (formerly the Youth Media Council) several times to obtain a copy, but because of the busy non-profit’s capacity, it was difficult for them to locate in their archives.

32 At first, Galcom agreed to do this, but then rescinded their offer. It is not clear why Galcom did not make the donation. A 2005 report from the Prometheus Radio Project states: “Galcom initially agreed to do this request, but later found out that for political reasons the radios they had in mind would be ready in time.”
and supplies, and connected them with missing family members. We also played Christian music and messages from local pastors... The FCC renewed the license of our station for another month since it had been so successful in its efforts the first month of operation. ‘Radio Hope’ as it was dubbed, was a team effort and did indeed offered hope to the victims of Katrina.

Each of the aforementioned LPFM radio stations have their own evolution stories, but were providing the varied constituent groups with the same service. Aside from Viet Radio, all of these initiatives were started by White outsiders, some of which were serving primarily African-American communities such as Radio Algiers or KAMP. There may have been other minority-initiated LPFM radio stations post-Katrina, but would the infrastructure or content and format of the broadcasts been different if the stations were started by African-American residents? The next section will analyze post-Sandy projects that in the “Inform” category.
While the post-Katrina examples are not rooted in LPFM radio, the goals of these initiatives remain the same as the post-Katrina LPFM stations – providing a platform to share information and garner resources. In fact, Dunbar-Hester (2009) argues that media “activists prioritized and (often intertwined) political and technical concerns as they negotiated which technologies were most desirable to help them realize their goal of a more democratic media system with significant access to media production” (Dunbar-Hester, 2009, p. 222). For instance, media activists’ current support and promotion of community wifi networks, which is the basis of the post-Sandy examples in this category, draws directly on their understanding of what is valuable in LPFM radio: “…the ability to ‘broadcast’ citizen-created content locally” (Dunbar-Hester, 2009). A local wifi network provides a community with its own server for the storage of content, potentially that community’s media.

One way to achieve a local wifi network is through mesh as opposed to an Internet service provider (ISP). Wifi Internet is based on ISPs, which are rooted in specific, centralized access points, far from service areas. Since the late 1990’s, a few giant corporations have been taking control over wireless technologies with a focus on profit maximization rather than building telecommunications for the public good (Meinrath, 2005). Mesh networks such as the original Red Hook Wifi, however, connect computers and devices directly to each other without passing through any central authority or centralized organization such as an ISP or a phone company. They connect to the larger Internet with multiple points of wired connection at different points in the mesh, and are powered by dynamic connections between nodes, and the only way to shut down the network is to turn off every single node in that network (Meinrath, 2005).
While Common Ground Collective did build a mesh network that lasted 4 months post-Katrina, this wireless infrastructure was not well-known as a “resilient communication infrastructure” until post-Sandy. This is perhaps because smartphones and other mobile devices were not as popular and accessible in 2005 as they were in 2012 (as discussed in Chapter 2).

1. **Red Hook WIFI & Red Hook Twitter**

   Red Hook WIFI is part of Red Hook Initiative’s (RHI) Digital Stewards program, which employs 50 young adults each year from ages 19-24 to build and maintain a neighborhood Wifi network. The program officially began after Sandy when the organization realized that an experimental Red Hook mesh network, simply consisting of two nodes (one at the RHI building and one at Coffey Park), was able to function after the disaster. The Red Hook Initiative building did not lose power after the storm so Internet access remained available inside and directly outside the building. A router in Coffey Park provided this same Internet to users within half a mile radius of that router’s location.

   After Sandy, with technical help from a local Internet Service Provider – Brooklyn Fiber and then eventually FEMA – the mesh network could distribute the Internet connection to locations where residents, first responders, and recovery volunteers needed it most. Its purpose was to serve as a hyperlocal information sharing system. Logging on to the Red Hook Wifi network was (and still is) free to any user in the neighborhood. Whenever an individual in Red Hook uses the network, a splash page displays local events, new businesses, local news, and other important place-based information. After Sandy, Tony Schloss, the Director of Technology at the Red Hook Initiative worked with RHI staff to create digital postings with information about Red Hook each day for months after the storm on the splash page. However, it is unclear how many people paid attention to this information. Within 6 months of the storm, young adults from the neighborhood, also known as Digital Stewards, partnered with local businesses to design, deploy, and maintain the mesh network as a form of local information sharing. These young residents got permission from local business owners and homeowners to install the routers on building roofs.

   Frances Medina, a young adult from Red Hook, took over the organization’s Twitter, Facebook, and Instagram after Sandy. When she did this, RHI had 350 Twitter followers and 150 Facebook likes. Within three days, it grew to 3,700 followers and 2,760 likes. Since she was stuck in her Bronx apartment and unable to actually go to Red Hook, she was frantically e-mailing, calling, and texting her family, friends, and co-workers on the ground. According to her, cell reception and Internet strength were spotty, but since RHI WIFI was working at the non-profit’s building, people were able to send her information through the network. She would say to everyone: "Guys, I went on social media. It looks like people are mobilizing to support with neighborhoods. I need to know what you guys need, because I’m not there." During the first few days, her contacts would respond with: "Water, flashlights, batteries." She would tweet these needs, and within an hour, a volunteer

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33 The story of Red Hook WIFI is extensively detailed in Chapter 4.

34 RHI did not have data about click on the splash page or the amount of time users spent on it.
(perhaps from Occupy Sandy, which will be discussed in the last mini-case of this section) saw the request on Twitter would deliver such items to the Red Hook Initiative.

Medina quickly learned that the Twitter world was using #sandyvols and #sandyvolunteers, and also began using the hashtag in her tweets. Medina saw these hashtags as an index of information and currently trains people on how to do research using hashtags. People were responding and mobilizing not only in Red Hook and all over New York City, but even across the country. When she tweeted, “Donate now” for the first time on November 1\textsuperscript{st}, 2012, the organization raised $100,000 within 24 hours, and eventually surpassed $500,000.

![Red Hook Initiative Tweet (11.1.12)](image)

Image 3.2 Red Hook Initiative Tweet (11.1.12)

2. Resilient Communities NYC\textsuperscript{35}

Through the RISE (Resiliency Innovations for a Stronger Economy) competition, the New York City Economic Development Corporation (NYC EDC) has funded Resilient Networks NYC, a program of New America, to teach five different community-based organizations in East Harlem, Hunt’s Point, Sheep Head’s Bay, Gowanus, and Staten Island how to build local WIFI networks and recreate the RHI Digital Stewards program in their neighborhoods. The aim is to organize small businesses in the respective neighborhood to host the routers. In several of these neighborhoods, small businesses tend to serve as information hubs for the rest of the community (Personal Interview with Kristin Bell and Kokei Otosi, NYC Economic Development Corporation, 2016).

Many of these community-based organizations were important anchors in their neighborhoods for residents after Sandy, and expressed a need for local communication systems that allowed them to share emergency information with their constituents. This sentiment was repeated by staff members at each organization. For example, a staff member at the The Point, a youth development organization in the Bronx and partner with Resilient Communities explained how the

\textsuperscript{35} Resilient Communities NYC will also be further detailed in Chapter 4.
neighborhood was in flux with a highly heterogeneous population, and not proper information sharing system. He asked, “How do you get the word out to everybody about what’s happening. I know certain information. I know my colleagues know certain information. Maybe some of the young people that come to [our] program know this information, but how about the other 40,000 people in the neighborhood (Personal Interview with Danny Peralta, 2016).

3. **Occupy Sandy Social Media**

An American Red Cross member that was working in New York City post-Sandy said he would always ask grassroots relief groups where they were getting all their volunteers and supplies, and the response always was, “the Internet.” (*The Resilient Social Network*, 2013, p. 55). This Red Cross member was undoubtedly referring to the social media operations of Occupy Sandy, a volunteer collective that emerged from Occupy Wall Street\(^{36}\), that operated across several New York City and New Jersey neighborhoods, and leveraged social media to keep the public informed, collect donations and resources, as well as mobilize volunteers. It is difficult to obtain exact demographic information about active members of the movement, but many were white, middle-class, and highly educated (*The Resilient Social Network*, 2013). Drew Hornbein, a computer programmer with Occupy Sandy said, “We were a lot of elite white people who knew how to use technology effectively” (Personal Interview with Drew Hornbein, 2016). Hornbein’s comment points to the fact that there were probably many technologically mediated resilience practices taking place

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\(^{36}\) Occupy Wall Street garnered national attention in September 2011 by protesting income inequality in the United States by occupying in Zuccotti Park in lower Manhattan. The group coined the phrase “We are the 99 percent.”
under the radar of the mass media. Members of Occupy Sandy had connections to the media, and so were a well-known grassroots group.

After Sandy, people in affected communities needed facts and information about what was going on because it took formalized relief workers from FEMA and Red Cross too long to arrive. Electricity and power was missing in several neighborhoods and there were no back up communication infrastructures in place. Occupy Sandy volunteers who visited affected areas on the ground used social media to both share and collect information with and from residents in these areas, as well as the larger public (Hornbein, 2016; Marie, 2016). “According to the Homeland Security Studies and Analysis Institute (2013), who prepared an ethnography of Occupy Sandy titled The Resilient Social Network, the group was so successful at these activities because (p. 65):

1. The horizontal structure of Occupy Sandy enabled the response functionality to be agile
2. Occupy Sandy used social media as the primary means to attract and mobilize a large volunteer corps, identify real-time community needs, and share information. Open-source software tools were used to coordinate rapid relief services.
3. Occupy Sandy leveraged the Occupy Wall Street infrastructure to emerge within days of the storm.
4. Occupy Sandy leveraged existing community infrastructure to address needs, establish relationships, and build local capacity.
5. Transparent practices increased trust among Occupy Sandy members and the general public.

Members of Occupy Wall Street were using social media (Facebook and Twitter) to discuss the storm before it arrived on October 29th, 2012. After Sandy hit, these same members began exchanging texts about whether it made sense to start a relief effort for those in need. The next day, early in the morning, a small group of these Occupiers drove to the isolated, terribly flooded, and damaged neighborhood of Red Hook in Brooklyn to bring food and ask people what they needed most. And on that same day in the evening, these Occupiers drove to the Rockaways in Queens, and asked people the same question. Because occupiers were accustomed to using the Internet and social media to broadcast an opinion or ask for help during times of crises, volunteers tweeted out what they learned.

In Red Hook, Occupy volunteers were also actively using Red Hook WIFI. Needs included food, water, batteries, blankets, etc. and it was from this outward facing communication that Occupy Sandy began to form. “We had networks in place and so it was easy to reach out to people,” recalls an Occupy Sandy organizer who also participated in Occupy Wall Street (OWS) (The Resilient Social Network, p. 26).

Occupy Sandy relied heavily on Twitter and set up the @occupysandy account within hours of the storm to bring more attention to the group’s fundraising efforts using the hashtag #SandyAid and organized volunteers using #SandyVols. They also set up a WePay account, an application that allows people to pool money for shared expenses. At that point, expectations were not much higher than raising a few hundred dollars or mobilizing 40 volunteers. A small group of Occupy Sandy
volunteers noticed that their community hubs\textsuperscript{37} were receiving many items that were unnecessary, and lacking a number of critical items. Thus, they set up an online space for donations using wedding registries on Amazon.com and began listing products that reflected the actual needs of area communities and Occupy Sandy volunteers. This is an example of community appropriation of sociotechnical infrastructure originally organized for capitalist ends.

Using the registry was faster than asking for the items online, guaranteed that the group received the number of each type of item required, and ensured that the supplies requested would be sent directly to Occupy Sandy headquarters in New York at the Church of St. Luke and St. Matthew in Brooklyn. As of November 11\textsuperscript{th}, they had received $100,000 worth of supplies, and a month after the storm, they had received more than $700,000 worth of supplies (\textit{The Resilient Social Network}, 2013).

Eventually, the @occupysandy Twitter account was used to make requests for specific items on their Amazon wedding registry list, announce initiatives, bring more attention to particular local initiatives, or re-tweet relief requests. By November 5\textsuperscript{th}, the @occupysandy account had over 5,000 followers. Occupy Sandy and InterOccupy, the interactive space and network of Occupy activists across the globe, also set up a Facebook page, which served as a repository to receive requests directly from community members and linked to the Occupy Sandy website and Twitter account. By November 17\textsuperscript{th}, the page had over 25,000 likes. In early December 2012, the network had 15 managers dedicated to maintaining affiliated Facebook pages and an admin group that vetted all posts before they were published.

Occupy Sandy members also asked the team Interoccupy – the string that connects the Occupy movements globally – and that built \url{www.occupywallstreet.net} to set up a website. It developed an “Interoccupy Hub,” which consolidated a few initial Occupy Sandy social media feeds, the WePay and Amazon account, and other resources to make the network’s two-way exchange of information available to the public. They set up a website at interoccupy.net/occupysandy that they used to organize and document their relief efforts. The website displayed maps that detailed volunteer meet-up locations, team leader trainings, donation drop-off points, and information on what work the group had already done. Occupy Sandy also maintained an intranet (a private network and database) that was, during off hours, staffed by a second volunteer team in London (Hornbein, 2016 and Marie, 2016)).

Cel.ly and text loops were popular communication methods among Occupy Sandy volunteers and organizers. These loops can send a single message to any number of recipients and enable the recipient to reply directly to the sender, without replying to all recipients. The @OccupySandy loops was open to everyone and @OccupySandyAid was only open to organizers though it included 1,500 people. “Occupy Sandy used cell loops to convey short updates on situations, as well as to identify volunteers with given capabilities or resources, such as those with access to a generator or vehicle”

\textsuperscript{37} The Occupy Sandy Hubs will be detailed in the “Organize for Place” section.
Lastly, the Mappler app, which compiles geographic information systems into interactive web and mobile-supported maps was a popular tool used among Occupy Sandy members. Uploading information onto Mappler allowed anyone with a phone or Internet connection to verify or change that information.

There were two clear modes of communication and media activities occurring simultaneously within Occupy Sandy – an external, public facing one and an internal organizing one (Hornbein, 2016; Marie, 2016). The external facing social media accounts would not have been as effective without the internal tech organizing, which included Google Docs, Sahana (an open-source disaster management software) that allowed Occupiers to manage the networks on the ground and digital activities through a centralized database. While the collective is not very active today, members do still manage its social media accounts, which shares relevant news and opinions about current events in New York City. Members of Occupy Sandy are confident that if another disaster were to hit New York City, they could mobilize immediately because the collective maintains a detailed database of thousands of volunteers, resources, and protocols (Hornbein, 2016; Marie, 2016).

**Inform: Conclusion**

All of the post-Katrina and post-Sandy examples were not just about broadcasting information, but about how to obtain resources for oneself and one’s community. In these examples, the content was not as important as the infrastructure that would reach the appropriate audiences. The temporary radio stations were not as instrumental in facilitating social ties and maintaining networks as the more permanent radio stations. It is important to note that while these efforts were indeed grassroots, each of these projects was founded or run by White people with specific technology skills (except for Viet Radio). Further research needs to explore digital survival practices of communities of color.

While Viet Radio was anchored in a spatial and ethnic community, its communication strategy was similar to that of Occupy Sandy that was not anchored in one physical community. The various Occupy Sandy geographic hubs were analogous to the other Vietnamese radio stations across the country, both demonstrating a non-spatial storytelling network (Ball-Rokeach, Kim, and Matei, 2001), based on relationships that existed before the storm.
**Investigate: Bottom-Up Journalism**

Bottom-up or citizen journalism\(^{38}\) features the voices of ordinary people investigating and reporting through the formal inquiry of lived experience or grassroots data collection. In highly mediated societies, news organizations play a pivotal role in setting the political agenda, framing the terms of public debate, and shaping public opinion. News, therefore, is not a simple reflection of historical reality; rather, “it is a complex system through which people attempt to understand and make sense of the world” (Howley, p. 10, 2010).

The concept of citizen journalism peaked between 1999-2000 when there were protests against World Trade Organizations (WTO) in Seattle and the World Bank/International Monetary Fund (IMF) in Washington DC, instigating the formation of The Independent Media Center (Indymedia or IMC). Indymedia is a collective of independent media organizations and hundreds of journalists offering grassroots, non-corporate coverage aiming to be an alternative to government and corporate media. During the WTO protests, rather than relying on mainstream media’s blurbs about, and glossy images of police teargassing anarchist activists, the public could look instead to the local and first-hand perspectives available on Indymedia’s website, “which received 1.5 million hits during the Seattle protests alone” (Stengrim, 2005, p. 282). In 2017, this may not seem like a big number, but at that time nothing received this type of traffic. The difference between bottom-up or “citizen journalism” with historical efforts to create alternative media is that it operates in a realm of hyper- and real-time electronic media (Stengrim, 2005). New media technologies altered the professionalization of journalism itself. Downing (2011) claims that the idea of citizen journalism has been technically crafted around the needs of crisis reporting because it is difficult for professionals to secure access to the scene citing the 2004 South Asian tsunami and 2005 London bombings, and 2008 Mumbai hostage crisis in which mainstream media relied heavily on “citizen” cell phone photos and videos.

As discussed in Chapter 1, historically, academics have always defined citizen journalism in opposition to mainstream media (Rennie, 2006). Bottom-up journalism adopts the philosophy associated with the Indymedia movement: “Everybody is a witness, everyone is a journalist” or “Don’t hate the media, become the media.” (Independent Media Center, 2004; 2006).

During the Progressive Era (1890s-1920s), muckraking referred to journalists who attacked established institutions and leaders as corrupt though these reporters were not always independent of mainstream corporate media. In this Investigate category, we see examples of individuals, collectives, or non-profits that present facts or hidden narratives about the disaster aftermath to hold government officials and/or decision-makers accountable, pointing us back to Jacobs and Schillermans’ (2016) typology about the ways in which digital and print media contributes to public

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\(^{38}\) I am using the coined term “citizen journalism” but conceptualize citizen as a resident rather than a citizen as someone with legal status within the nation state.
accountability. Several informal post-Katrina blogs have formalized into well-known local news sites because of the successful muckraking activities of bottom-up journalists. For instance, The Lens initially came out of blogger Karen Gadbois's blog Squandered Heritage. She began blogging immediately after Katrina in 2005 (and had never even used a computer before) and published facts and research about demolitions occurring across New Orleans, eventually uncovering a big city scandal about the use of public funds. After this, she partnered with journalist Ariella Cohen and the former editor of the Times-Picayune and founded The Lens (a non-profit organization). While very popular in NOLA, it has also been criticized by certain groups for being too "white" in its perspectives. (Personal Interview with Timolynn Sams, 2016).

Post-Sandy, the Jersey Shore Hurricane News Facebook Page served as a reliable news source for residents of Monmouth County and Ocean County in New Jersey. Launched on August 23, 2011 two years before Sandy in preparation for Hurricane Irene, the founder of Jersey Shore Hurricane News Facebook Page sees himself as a bottom-up journalist “who stops rumors” (Personal Interview with Justin Auciello, 2017). When he receives information from a Jersey Shore resident, he double-checks the facts are correct by referencing it with other residents or visiting the site itself before posting the story on his popular page.

Table 3.6 Bottom-Up Journalism Examples

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Post-Katrina

Table 3.8 Timeline of Bottom-Up Journalism Examples Post-Katrina

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When Katrina hit, *The Times Picayune* was New Orleans’ most well-known and popular daily paper, published since 1914. The paper gained much fame for its reporting of the disaster. It was awarded the Pulitzer Prize for Public Service in 2006 and four of the staff reporters received Pulitzers for breaking-news reporting of the storm. Over a dozen staff members did not evacuate before Katrina and slept in sleeping bags in the publication’s office building. These reporters posted continual updates on the paper’s affiliated website, NOLA.com until everyone was required to evacuate on August 30th, 2005. *Times-Picayune* reporters saw themselves with a new role during the crisis, which included advocating for the city when national media coverage was incorrect. They aimed to help New Orleanians and other readers understand the complications of post-Katrina life (Personal Interview with Sarah Thibodeaux, 2016; Usher, 2009).

After the storm and flooding, due to electrical outages and damage, the *Times-Picayune* printing presses were not functioning, and therefore staffers created PDF newspapers that only circulated digitally. The affiliated website, NOLA.com began to foster bottom-up journalism as tens of thousands of evacuees began using the site’s forums and blogs to post their experiences, questions, needs, and various types of information (Thibodeaux, 2016). Journalism experts believe that NOLA.com’s role in facilitating “citizen journalism” on such a massive scale was unprecedented.

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39 After three days of PDFs and digital publication, the paper resumed printing in Houma, Louisiana and in September 2005, operations moved to Mobile, Alabama (Alexander et al, 2014).
and a seminal moment in reporting history (Usher, 2009). The site also helped dispersed residents find one another, and aid agencies such as FEMA and the Red Cross have credited the platform with helping to save lives (Usher, 2009).

Figure 3.3 Online Home Page of Times Picayune (9.1.05) (Left)

**Sample Forum & Chat Posts (Right)**

The parent company of the *Times-Picayune*, Advance Publications, announced in May 2012, that it would only print a paper edition three times a week, and that NOLA.com would provide daily information (Carr, 2012). These budget cuts spurred the formation of The *Times-Picayune* Citizens Group, comprised of civic leaders and concerned residents. For example, member Anne Milling (Founder of the organization, Women of the Storm) stated: “Now is not the time to switch suddenly to a three-day a week publication. A daily *Times-Picayune* has been the backbone of the community in our post-Katrina environment and provides the foundation for all civic dialogue and discourse. It is our hope that the owners will respect the voices and desires of the community which has been so loyal to the printed newspaper for generations” ([http://gnoinc.org/](http://gnoinc.org/)). While this sentiment may be
overstated, it demonstrates the connection New Orleanians had with the local paper. Advance Publications did not oblige and even today, the paper only prints three issues a week. The *Times-Picayune* operations are no longer based in the city, and moved to Baton Rouge. As a result, New Orleanians have also complained that softer news has become more prevalent on NOLA.com at the expense of politics, education, and other pertinent city issues (Alexander et al, 2014).

Clearly the *Times-Picayune* fulfilled a critical information and communication need during and after Katrina. However, one publication cannot capture the diverse realities of the city or focus on certain topics over long periods of time. Additionally, Advance Publications’ decision to decrease the circulation of the paper edition only magnifies the need and desire for bottom-up journalism. In his *New Yorker* article “Don’t Call it Katrina,” Tulane professor and writer Thomas Beller discusses the concept of the “external media” which he borrowed from New Orleans historian and geographer Richard Campanella’s *Places* essay, “Katrina Lexicon,” that highlights the vocabulary and metaphors that emerged in the city post-disaster. Beller (2015) writes:

‘External media representations’ is an awkward, interesting phrase. It suggests a fundamental division as perceived by New Orleanians: either you were inside the city and understand, or you were not and do not.

The following examples of bottom-up journalism show the perspectives of those from “inside the city” or “inside a specific geography” (even if after the storm, they were elsewhere) and how these individuals investigated, produced, and shared knowledge within and outside their geographic communities.

1. **Levees.org**

Sandy Rosenthal and her son Stanford Rosenthal founded Levees.org in December 2005 to combat the “official” government reasons as to why the levees broke and New Orleans flooded after Katrina. The mission of their site, which is incorporated as a 501(c)(3) is to provide “education that the flooding of metro New Orleans was a manmade civil engineering disaster, not a natural disaster.” The Rosenthals were mainly responding to the myth that “the residents of greater New Orleans understood the risk they faced from hurricanes and thus were stupid for living there” (Rosenthal, levees.org, 2011). The site states: “Levees.org shall not stop until the truth about the New Orleans flood becomes mainstream.” Although never trained as investigative reporters, Rosenthal and her son extensively researched and disproved several Katrina myths. They have also worked closely with experts in the field, who have provided their services free of charge, to debunk these myths. I have included a selection of myths and their corresponding facts below:

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40 *The New Yorker* article “Don’t Call it Katrina” is named after Sandy Rosenthal’s (of levees.org) book of the same name. The phrase refers to the controversy that Hurricane Katrina was a manmade disaster, and not a natural one (therefore, should not be prefaced with “Hurricane”). “Don’t Call it Katrina” is the conversation about how to actually talk about and speak to the tragedy.

**Myth:** It was the New Orleans Levee Board that forced the Army Corps of Engineers to build an inadequate levee system in and around New Orleans. The Orleans Levee Board ignored federal requirements regarding the maintenance of the levees.

**Fact:** According to an article in *Water Policy* (Vol 17, Issue 4), the levees failed because of a mistake the Army Corps of Engineers made in the 1980s when interpreting the results of a levee study. Again, it was the Army Corps of Engineers, not the levee board, that inspected maintenance activity.

**Myth:** The City of New Orleans lies below sea level, and thus should not be rebuilt.

**Fact:** Approximately 50% of New Orleans is above sea level (Center for Bioenvironmental Research, Tulane University).

**Myth:** Even though New Orleanians were warned that the levees in the cities could breach, approximately 100,000 people stayed in the city and did not evacuate.

**Fact:** Federal and state officials, as well as engineering experts gave no warning that the levees could fail.

**Myth:** After Katrina, those who sat on the levee boards were replaced or reformed their ideas. These levee boards were made similar to those that exist in other parts of the U.S.

**Fact:** Rosenthal and H.J. Bosworth’s (an engineer) research on levee board appeared in *The Times Picayune* in 2011. Their article reported that the appointees on the pre-Katrina levee boards knew little to nothing about hurricane protection, but cannot be blamed for the levee and floodwall failures because “the contracts for both designing and constructing the hurricane protection system are controlled by the Army Corps of Engineers, and the contracts the local levee boards controlled were for non-flood assets” (Bosworth and Rosenthal, 2011). After Katrina, at the request of the federal government, the state of Louisiana formed two new flood authorities: Southeast Louisiana Flood Protection Authority-East and Southeast Louisiana Flood Protection Authority-West that would oversee the activities of the Army Corps of Engineers. It is required that these flood authorities include hydrologists, engineers, civil engineers, and other professionals that are supposed to hold the Corps accountable and assure that a disaster like Katrina would not occur again. No other entities existed like this elsewhere in U.S.
**Myth:** Environmental activists blocked the Army Corps of Engineers’ original plan for massive peripheral barriers. These environmentalists forced the agency to propose a second inferior design.

**Fact:** According to an article in *Water Policy* (Vol 17, Issue 4), the Army Corps decided on their own that the High Walls Plan (increasing the height of levees), was less costly and less damaging to the environment.

**Myth:** Because it is completely dependent on levees for protection, New Orleans should not be rebuilt.

**Fact:** Ezra Boyd, who has a PhD in Geography from Louisiana State University, completed research for levees.org, which was also published in *Times Picayune* (2010) and found that “levees more than pay for themselves when their cost is compared to the investment they protect.”

**Myth:** The Army Corp of Engineers admitted that the failure of the levee system during Katrina was due to their oversight.

**Fact:** The Army Corps of Engineers has wrongly directed blame toward local officials and environmental groups without ever accepting responsibility for the breach of the levees.

In an interview for the *New Yorker*, Beller asked Rosenthal why she dedicated her site to the issue of semantics and blame. She responded that after Katrina, America was told a fairy tale about a monster storm with corrupt local officials, and residents who suffered were actually blamed for their misfortune (Rosenthal summarized from Beller’s article in the *New Yorker*, 2015). Rosenthal sees her role as transforming complicated, technical information into accessible knowledge. She uses the larger, well-known media as a vehicle for getting her message out and shifting blame for the disaster to the Army Corps of Engineers. Research from Levees.org has been featured in the *New York Times*, *The Boston Globe*, *The Washington Post*, *The Christian Science Monitor*, *The Huffington Post*, *The Guardian*, CBS, Associated Press, *Newsweek*, Google News, Bloomberg News, BBC News, NBC News, *The New Yorker*, *The Nation*, NPR, *The Time Picayune*, *The New Orleans Advocate*, among others.

In order to correct the circulation of false information about Katrina, in 2007, Levees.org launched a letter-writing team to contact and educate the editors of news sources whenever its reporters released inaccurate facts about the storm and New Orleans. The organization also awards “Seals of Approval” to journalists who illustrate the flooding in metro New Orleans as due to levee failure rather than blaming the flooding solely on a storm, a rhetoric which denies human
responsibility. Additionally, the organization uses YouTube videos to educate viewers about the 2005 flooding, and have uploaded 48 videos since 2007. These videos are brief documentary shorts and recordings of public presentations. One video, The Katrina Myth, released during the Republican Convention in August 2008, and was the #4 most viewed video under YouTube’s News and Politics for nearly a week.

The organization receives no funding from corporate sponsors or stakeholder groups, and runs mostly on supporter donations. Levees.org still exists, is very active today, and seeks to achieve the following goals:

1) To place term limits on the Southeast Louisiana Flood Protection Authority nominating committee;
2) To place a Relic Flooded house at a major levee breach site on the National Register of Historic Places;
3) To pass the 8/29 Investigation Act, an independent post disaster analysis

On March 30, 2015, the news director of the local NPR station, Eve Troeh, published a post in preparation for the ten-year anniversary of Katrina in New Orleans inspired by Levees.org. She wrote:

...in newsrooms across the city and, yes, the nation and presumably the world, journalists are staring down blank whiteboards with the headline: Ten-Year Anniversary of Hurricane Katrina. We are figuring out how often and in which contexts to gracefully add the phrase ‘and the federal levees failures’ without upsetting sentence structure, or whether to simply call everything ‘the flood.’

2. The Lens

Karen Gadbois, one of New Orleans’ most famous bloggers, reflects, “...I was not civically engaged in any way before Katrina.” She had moved to New Orleans in 2003 from San Maiguel de Allende inspired by the thriving arts scene. It was the act of blogging that deeply tied Gadbois to the NOLA. She lived in the city’s Uptown neighborhood of Carrollton, and about one year after the storm, she noticed that many property owners in the area chose to demolish their homes rather than renovate them. FEMA would subsidize the demolition, which is why so many property owners chose this option. She started her very first blog, Squandered Heritage on August 15th, 2006, and explained: “…I was specifically interested in the demolition process and what the city was giving up by just sort of allowing federal money to influence that process” (Personal Interview with Karen Gadbois, 2016). Gadbois was concerned that as these rapid demolitions took place, the city was also quickly losing its architectural cultural assets.

In 2007, the City of New Orleans labeled 1,700 homes as “imminent health threats” and used federal money to knock these properties down. Using the legal notices published in the Time-Picayune as a guide, Gadbois meticulously tracked and photographed these buildings on her blog.
Even if homes were repairable, they were torn down, and oftentimes property owners were not even notified. Some of these owners were waiting for Road Home grants to repair their houses while other owners had already started renovations. As *Squandered Heritage* became more popular, readers and other bloggers began to volunteer their time to photograph and track these properties as well, supporting Gadbois' efforts.

Also in 2007, the city paid a local housing agency called New Orleans Affordable Homeownership (NOAH) to renovate and rebuild homes owned and inhabited by low-income and elderly residents. Similar to the demolitions, the federal government paid for these repairs. After obtaining a list of properties that NOAH had supposedly fixed, Gadbois completed her usual drive-by inquiry and review. She found that some of the addresses on the list did not exist and that many of the homes had not been touched since the storm. Strangely enough, many of these homes were on the city's list of properties to be demolished (Gadbois, 2016).

*Image 3.3 Excerpt from Squandered Heritage (7.31.07)*

Eventually the *Wall Street Journal* picked up Gadbois’ research and published a front-page story in August 2007 titled, “Katrina Survivors Face New Threat: City Demolition; Some Salvaged Homes End Up on Condemned List.” An excerpt from the article states:

IdaBelle Joshua worked hard to take care of her two-story house in the Lower Ninth Ward, even after Hurricane Katrina flooded it up to the roof and exiled her 150 miles away.

She spent $5,000 to have the brick house gutted, $275 to clean it and then went to City Hall on July 5 to make sure 2611 Forstall St. wasn’t on a list of derelict properties here facing demolition because of storm damage. Two city employees assured her that the house was safe, she says. Two days later, her nephew called.

He had gone by to mow the lawn. But the house where Ms. Joshua and her late husband had raised three children was gone. It had been knocked down by the city. Since then, she has been trying to get an explanation, but with no luck (Brooks, 2007).

Because the article credited Gadbois for her investigation, *Squandered Heritage* became even more popular, inside and outside of New Orleans. And then Lee Zurik, a reporter from WWL-TV joined forces with Gadbois to report on the scandal, which unfolded in approximately 50 stories. In August 2008, *The New York Times* reported about the misuse of public funds, discussing the importance of *Squandered Heritage*:

The citizens of this scarred city have grown accustomed to promises of grand official projects that will infallibly transform life here but somehow never do. Their attention is diminishing. But not in the case of Karen Gadbois. She jumps in her car and checks up on the promises, driving for hours across the city, then blogs about the results on her kitchen table... (Nossiter, 2008)

By 2012, four contractors pleaded guilty to stealing federal funds in the NOAH-home remediation scam. Gadbois, who had no formal training in journalism, investigative reporting, or media production has won the Peabody Award, an Alfred I. DuPont-Columbia Award, and a gold medal from Investigative Reporters and Editors. Interestingly enough, Gadbois does not see herself as a journalist and classifies her activities as “civic reporting.”

While Gadbois was uncovering the NOAH remediation scam, she collaborated with newcomer journalist from Brooklyn, New York City – Ariella Cohen – to transform *Squandered Heritage* into a news site exclusively about land-use issues. Gadbois explained, “We believe that land-use is at the root of every story. For me, also, it's interesting to think about how planners and policymakers who deal with land-use get their news. And how they decide what they're going to listen to.”

With help from a former editor of the *Times Picayune*, they applied for grants to fund their site, and used the success of *Squandered Heritage* as evidence that more bottom-up journalism sites
in New Orleans were crucial for moving towards justice in the city. Gadbois said, “When we were trying to launch The Lens, it was still early in the rise of non-profit news. Our first grants came from a coalition focused on transparency (that no longer exists) and the Open Society Institute.” Gadbois and Cohen asked themselves as they launched, The Lens, “How do we do call to action without actually doing a call to action? How do we incite people?”

The Lens was officially founded in November 2009 and established as a Louisiana nonprofit in February 2010. It was granted federal 501(c)(3) tax-exempt status in December 2012. Until then, The Lens operated under the fiscal sponsorship of The Center for Public Integrity, one of the first non-profit newsrooms based in Washington D.C.

The Lens now covers far more than land use issues, and reports on criminal justice, schools, government and politics, and the environment. The online publication started as one woman’s blog, which turned into a two-women news enterprise. Today, it is an online watchdog publication with a staff of eight people. It is the first non-profit journalism venture in the City of New Orleans, and is funded solely through private donations. Gadbois still writes for The Lens and believes that even though the news outlet is now staffed with professionally trained journalists, it is still a form of “grassroots” and “inclusive” reporting. She stated:

Before The Lens if you were trying to get a hold of a reporter, whether it be TV, radio or print, you could not find e-mail addresses, you could not find contact information, you could not hit them up on Twitter. These were like untouchables, which was ridiculous to me. Why would you do that? Why would you insulate? (Personal Interview with Gadbois, 2016).

Her number one goal as a reporter is to be accessible. The publication even hosts events that are open to anyone from the public to learn about issues in the city. Since traditional newsrooms are facing budgets cuts and have been curtailing long-term investigative reporting, The Lens aims to fill that gap. They provide readers with all source documents in case they want to check or challenge the publication’s stories or build on the narrative with their own research. The “online” aspect of the publication makes the source documents accessible to the public. However, since The Lens is not available in print, it may exclude readers who do not have access to the Internet or have a low level of digital media literacy.

3. The Trumpet

The Neighborhood Partnership Network (NPN) officially formed on March 15th, 2006, but they published their first issue of The Trumpet, a “grassroots newspaper” in January 2006 before the organization was formalized (Personal Interview with Timolynn Sams, 2016). NPN is an intermediary that helps connect leaders and stakeholders across the city’s diverse neighborhoods. “NPN’s leadership recognized the need for a citywide framework to assist communities in maximizing the use of limited resources and information while providing connections to those with similar obstacles, eliminating duplication of efforts and working toward shared goals” (www.npnlnola.com).
The Trumpet emerged because there was a need after Katrina to share information through personal stories (Personal Interview with Timolynn Sams, 2016). Participants of the Bring New Orleans Back Commission identified this missing component of the city’s communication infrastructure. “The media has been able to manipulate the conversations that happen in community, and when does community ever get an opportunity to tell their own story? What The Trumpet does is gives you a platform to tell your story...my responsibility as the executive director is to ensure that their voices and their stories are being told because if I silence them, I’m doing no better than traditional media,” explained Sams. To her, The Trumpet issues are important artifacts of history: “Just think about what happens 20 years from now when people are talking about Katrina, or when the city is 300, you have the actual artifacts.”

One of the challenges with the The Trumpet is that it tries to focus on and represent lower-income minority neighborhoods in New Orleans, and in these places, residents’ literacy levels are not strong. Therefore, NPN staff members (usually Americorps Vista members) record contributors’ stories and transcribe the recordings as articles. After Katrina, the organization had 10 Americorps Vista members that would work with contributors, who were “everyday residents” (Sams, 2016). A few years after the storm, the newspaper published stories from non-profit workers to portray a more systemic perspective of the city (the decline in Americorps workers also made it difficult to recruit stories from unaffiliated neighborhood resident contributors).

At first, the publication was just four pages, released monthly. After a year, it transformed into a 32-page newspaper published every other month. NPN then built a partnership with Louisiana Weekly, a 90-year-old historically African-American paper. When a new issue of The Trumpet is released, it is disseminated inside of the Louisiana Weekly. The publication has always been printed as well as free, and then starting in 2008, issues were also available online.

Sams believes that while other alternative media efforts in the city are well-intentioned, they can still criminalize African-Americans. She cited The Lens as an example explaining how their approach to investigative journalism leaves out the voices of the city’s Black people because some articles portray Black leaders negatively for their wrongdoings. Currently, The Lens has

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42 The Bring New Orleans Back Commission was established by the former mayor of New Orleans, Ray Nagin and included a racially-diverse group of leaders, thinkers, and activists in the City who were tasked with advising on rebuilding.
an all-white staff of seven, and in the past had two black writers (one from 2009-2010 and another from 2010-2014), and one black audio producer from 2013-2014. While Sams is not defending the immoral actions of these individuals (e.g., stealing public funds), she feels the tone of these articles can portray the entire demographic negatively.

She noted that Karen Gadbois (co-founder of The Lens) was also one of the founding members of The Neighborhood Partnership Network. However, she emphasized that one’s race affects one’s leadership style. How one leads, then in turns affects how the public realizes facts disseminated information. She stated, “Again, that goes back to how The Lens is now run by a white man who comes out of media, who comes out of news; I am an African-American woman who comes out of community organizing: very different perspectives, very different leadership approaches.” The Trumpet’s fluid and ad-hoc collection of real life stories may not be considered “real journalism,” but Sams believes their method of content creation and collection is critical for understanding the resiliency of individuals (Sams, 2016). She explained:

It is through the stories of people, when articulated well, that you get a different sense of what their life is like, what their experiences are, what their dreams are, what their hopes are, and how they are resilient. When we talk about resiliency as a city, we talk about places. We don't talk about the resiliency of people and how people have been resilient in the midst of their oppression, and so what The Trumpet does is it shows that my resiliency is connected to my oppression. It's almost like the things that people celebrate in New Orleans and probably most poor communities are the things that are oppressed, soul food, music, all of those things came out of somebody's pain. That's what The Trumpet is... (Sams, 2016)

In this way, the stories in The Trumpet emphasize lived experience as facts. Investigation and research is not needed for a person to simply tell others how they overcame an insurmountable challenge. Sams wishes information in The Trumpet reached more of her constituents, especially those who are not literate. Her future vision for The Trumpet is to create a local NPN media conglomerate that includes radio and television programming as well.

4. Uptown Messenger & Mid-City Messenger

Uptown Messenger and Mid-City Messenger are hyperlocal online news sites founded in 2010 and 2013, respectively, several years after Katrina. Even though these hyperlocal news sites emerged long after the storm, founder and editor Robert Morris believes, “What we were doing here would not be happening without Katrina. The neighborhood level community organizing that was so central after Katrina welcomed us, and helped residents and stakeholders realize they needed us.” In fact, in 2012, many people evacuated for Hurricane Isaac, and they would use Messenger reporting to figure out if and when it made sense to come back. “A lot of people told me that I was their main information source,” said Morris.

Morris was in a traditional print newspaper career for the first eight years of his professional life. He first worked for a paper that was based in Myrtle Beach, and was reporting on half of South
Carolina. It frustrated him that he was disconnected from the several communities he covered and served. Then he was hired by a paper newspaper in Houma, fifty miles South of New Orleans, directly after Katrina. He enjoyed the more local storytelling and appreciated forming sustained relationships with those he wrote about and those who read his stories. He saw the act of documenting and distributing information as a form of community development and social capital building. This experience and a desire to move to New Orleans is what inspired Morris to create Uptown Messenger in 2010.

Figure 3.4 New Orleans Neighborhoods: Uptown & Mid-City

Table 3.9 Uptown & Mid-City Demographics

<table>
<thead>
<tr>
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<th>UPTOWN 2000</th>
<th>UPTOWN 2010</th>
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<td>People living in poverty</td>
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<tr>
<td>People living above poverty</td>
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</tr>
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<td>MIDCITY</td>
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<td>MIDDAY</td>
<td>2000</td>
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<tr>
<td>People living in poverty</td>
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<td>28.8%</td>
</tr>
<tr>
<td>People living above poverty</td>
<td>67.9%</td>
<td>71.2%</td>
</tr>
</tbody>
</table>

At this time, aside from NOLA.com and The Lens, online news outlets did not really exist. While every media company had a website, there were no small scale digital news spaces. His idea was to build a hyperlocal online news site. “Newspapers commemorate history in the making. What digital media does that print media is bad at is that digital media is really good at making human connections.”

Morris explained, “The Times Picayune was really famous for having one of the highest readerships in the country. I was worried that people were going to ask why do we need a new outlet for information? But this was not the response I got.” After Katrina, neighborhood identities became stronger among residents who were trying to rebuild their homes and lives. People had already
started using platforms such as Yahoo Groups in 2006 right after the storm (discussed in more detail in a later section) to share information about their neighborhoods. Morris relied on Twitter to start Uptown Messenger:

Using Twitter, I would take requests and make house calls. For example, if a tree had fallen, I would take a photo and tweet it and write about what I saw. I would keep a log of questions people asked me in person and on Twitter and wander around the neighborhood to try to get answers.

One of the most important roles of the Messenger is reporting on neighborhood meetings that are rarely covered by larger news outlets. Morris explained, “In planning and policy you have all these different stakeholders that have different knowledges, but the only places where these knowledges get exchanged are these types of public meetings. Everyone at the meetings are also held accountable because they know it will be reported through the Messenger.” For this reason, Morris calls the site “hyper accountable.” “If there is a neighborhood meeting and there is one neighbor a block or two to the right that will have one position and then a neighbor a block or two to the left that has another position, [and] I don’t represent both their viewpoints accurately, I will hear from them. I am not inviting them to help me report, but I do feel responsible to make sure they do feel represented properly.”

Morris also acknowledges that some residents Uptown and in Mid-City may not be able to access the news on Messenger. Table 3.9 above shows that Uptown is slightly wealthier than Mid-City, and much less diverse. He does not believe this is because of digital divide, but more so due to media literacy and lack of interest in neighborhood issues. He reflected,

If there is a segment of the population that cannot read what I am writing, this represents a moral issue. There is a resident nearby who is in her 90’s. People told me that every day she asks coffee shop workers on Freret Street to read her the headlines of Mid-City Messenger because she does not know how to log on to the site herself.

This is not the only example of how the information and news from then Messenger is acquired through non-digital means. There is a barber shop on Freret Street in Mid-City next door to the Messenger office that caters mostly to African-American clientele who are not well-represented at the neighborhood meetings. If there is an article or news of particular salience, Morris prints out the information and pins it up on the shop’s bulletin board. The owner always thanks him for doing this and is sure to read the story and share it with clients.

The Messenger exists primarily on advertising revenue and is run by Morris who hired part time employees to help him. Every now and then, larger media outlets pick up out stories from his Twitter and that will bump click numbers to the site. Though that is not the point of Messenger; local readership is their main measure of success (Morris, 2016).
5. **Bridge the Gulf**

*Bridge the Gulf* self-identifies as “a community media project that lifts up the voices of Gulf Coast communities working towards justice and sustainability” (bridgethegulf.org). The site is an online platform that allows anyone from the Gulf Coast to share their multimedia stories through a blog called Voices from the Gulf and a video archive called Stories from the Gulf. While the site launched in 2010, ideas for the project actually started brewing in 2001. It was at this time that civil rights historian and activist Derrick Evans and filmmaker Leah Mahan began to document through video the history of Turkey Creek, an African-American community in coastal Mississippi, which was at risk of being erased due to powerful corporate interests. An emancipated group of African Americans settled along Turkey Creek in 1866, which grew into a small, close-knit black community. Today, the area is surrounded by the Gulfport-Biloxi International Airport, U.S. Route 49, and an industrial seaway.

Katrina ravaged Turkey Creek and the historic neighborhood became even more at risk of disappearing as developers and local politicians encroached on the land to rebuild. Evans and Mahan realized that many low-income communities in the Gulf South were suffering from similar problems due to disaster capitalism (discussed in Chapters 1 and 2), or the profiting of large companies from crisis. “While national media attention turns towards the Gulf Coast during particular news cycles, there is struggle and triumph happening every day in communities across the region. Most of the important drama happens under the radar, away from the cameras and headlines” (bridgethegulf.org).

Evans co-founded the Gulf Coast Fund for Community Renewal and Ecological Health, which was led by a team of policy advocates, community activists, and organizers from Louisiana, Mississippi, Alabama, and Texas. The organization saw themselves as movement-building philanthropy and wanted to funnel resources to grassroots groups. As the Gulf Coast Fund made grants across the region to aid with Katrina recovery, members along with Evans and Mahan witnessed how so many stories were missing from the news. This was concerning to them because they believed philanthropists and donors relied on the news to make decisions about what initiatives and areas were important to fund.

With footage from Turkey Creek, Mahan and Evans approached the Kellogg Foundation in 2009 with their idea for a storytelling platform to allow people to share their Katrina rebuilding struggles. The Foundation gave them a grant of $100,000 to execute their vision. Given that the members of the Gulf Coast Fund also helped articulate the idea initially, the Fund gave financial support as well. A beta version of the site launched in 2010 right when the BP Oil Spill occurred in April. This disaster gave Bridge the Gulf a renewed importance. Evans and Mahan used the networks of The Gulf Coast Fund to recruit individuals throughout the region to tell their post-Katrina and post-BP oil spill stories.

Karen Savage, a blogger from *Bridge the Gulf* discussed how it takes years and years for scientific studies to prove the effects of the oil from the disaster on local ecosystems, but that
fishermen were seeing these effects right away, every day. “These fisherman should not have to wait or bang on the doors of mainstream media to broadcast their expertise,” explained Savage. Mahan indicated that reporting from the oyster harvesters was most eye-opening since there were few places to get information about how the oil spill affected these livelihoods. Oystermen’s earnings had decreased by at least 15% since the spill and many were sick. One of the main challenges with Bridge the Gulf was that those who needed to tell their stories did not have the time, capacity, or technological know-how to do so. Therefore, bloggers such Karen Savage (who was mostly a volunteer) and one fulltime staff member Ada McMahon, would travel to different towns and cities, and worked alongside community members to produce content. Sometimes the posts would be written or recorded interviews, and other times they would be created by the community members themselves with technical assistance.

“People loved telling their story and being heard. If you never had a story on the Internet and then have that experience, it literally legitimizes your existence,” said Savage. When I asked Savage about how the organization evaluates the success of their work, she responded, “…sometimes you only need one or two people to see a certain story or you just want the storyteller to feel their experience is valid.” She gave the example of Adam Williams’ story from 2015. Williams has been a BP oil spill worker since 2010 and became ill doing this work. “Something’s wrong…I made good money when I worked with them, but now I have all these medical problems. Who’s going to pay for that?”

In his post, which Savage wrote, he discussed how a large percentage of toxic exposure victims were uninsured when they first became ill and only went to a doctor when their symptoms became unbearable. Williams was ecstatic to see his story on Bridge the Gulf and sent it to everyone he knew.

It was the social media aspect of the project that helped facilitated important human connections. Most of the fisherman that worked with or contributed to Bridge the Gulf accessed the Internet through their phones, and would post pictures on Twitter or Facebook of what was happening in the water after the spill. “Social media was being used across the Gulf to discuss the BP Oil disaster on the ground, and Bridge the Gulf was part of this conversation,” said Savage. She remembered how the wives of fisherman would make it a point to post images or narratives from their husbands’ fishing trips on these platforms. Bridge the Gulf would highlight these lived

experiences and people who did not know one another would connect and support one another through similar struggles.\textsuperscript{44}

Both Savage and Mahan emphasized that \textit{Bridge the Gulf} was not an activist group and that they do not identify with one issue or one agenda. “Our role is to get the information out there,” said Savage. “We are always on the border between activism and journalism, but it shouldn’t be about advocating and aligning around a particular agenda. It should be more about storytelling. But people did want a call to action to emerge; they want their stories to incite,” explained Mahan. The group and the site still exist today, but it is difficult to maintain because of funding.

A few dedicated members manage social media accounts and there are some regular contributors such as Joe Womack, an activist from Africatown in Mobile, Alabama. Similar to Turkey Creek, Africatown was formed by freed slaves from West Africa around 1860, and has been fighting for its survival amid post-Katrina rapid real estate development. “We had no real voice and there are less than 2,000 people left in our community” shared Womack. “My [Bridge the Gulf] blog has been more instrumental to get things done for the community than anything else,” he continued. The residents of Africantown are either over the age of 50 or under the age of 15 so residents are not as engaged on the Internet. However, information from the blogs do reach those in a position of power to help the community either through strategic e-mailing or because larger news outlets pick up the story.”

In fact, many of the stories on \textit{Bridge the Gulf} have been featured on larger news outlets such as the Daily Show, the \textit{New York Times}, and Al Jazeera. “People felt overlooked or ignored by mainstream media so we created Bridge the Gulf; and then it became a resource for the mainstream media,” stated Leah Mahan.

6. The Listening Post

Similar to Robert Morris, journalist Jesse Hardman wanted to engage communities in a longer-term, more meaningful way – not just as subjects. When it comes to information access, he believes that not only is it the responsibility of reporters to meet people where they are, but to also train audiences to be their own storytellers. After working abroad in disaster-struck and disaster-prone areas such as Sri Lanka and Pakistan for several years, Hardman moved to New Orleans in 2013 because he felt it was a city that could relate to “developing world struggles” especially with regard to information access (Personal Interview with Jess Hardman, 2016). “A lot of people still don't go home to a computer in a city like [New Orleans], explained Hardman. Hardman designed the \textit{Listening Post} – a crowd-sourced, bottom-up journalism radio program for New Orleans Public Radio, WWNO (89.9).

His motivation for starting the \textit{Listening Post} resonate with many of the issues described in chapters 1 and 2 regarding mainstream media such as the fact that local newspapers around the

\textsuperscript{44} This resonates with the Therapeutic Networking category.
country have been cutting newsroom staff and that this mass consolidation is creating media deserts, leaving communities without coverage. Hardman sees this as a communications crisis that requires innovative thinking. Individuals in these media deserts need basic information about their communities to participate in society (Hardman, 2016).

Figure 3.5 New Orleans Neighborhoods
(Neighborhoods of interest highlighted in purple).

Source: New Orleans Planning Commission & The Data Center (https://www.datacenterresearch.org/)
Table 3.10 Neighborhood Demographics

<table>
<thead>
<tr>
<th>Neighborhood</th>
<th>2000</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>READ BLVD EAST</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Population</td>
<td>8,240</td>
<td>7,283</td>
</tr>
<tr>
<td>Black</td>
<td>73.3%</td>
<td>81.2%</td>
</tr>
<tr>
<td>White</td>
<td>16.6%</td>
<td>3.4%</td>
</tr>
<tr>
<td>Asian</td>
<td>6.8%</td>
<td>12.7%</td>
</tr>
<tr>
<td>Hispanic (Any Race)</td>
<td>1.4%</td>
<td>1.6%</td>
</tr>
<tr>
<td><strong>GENTILLY TERRACE</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Population</td>
<td>10,542</td>
<td>8,210</td>
</tr>
<tr>
<td>Black</td>
<td>69.7%</td>
<td>77.8%</td>
</tr>
<tr>
<td>White</td>
<td>24.9%</td>
<td>15.3%</td>
</tr>
<tr>
<td>Asian</td>
<td>.5%</td>
<td>.4%</td>
</tr>
<tr>
<td>Hispanic (Any Race)</td>
<td>3%</td>
<td>3.8%</td>
</tr>
<tr>
<td><strong>CENTRAL CITY</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Population</td>
<td>19,072</td>
<td>11,257</td>
</tr>
<tr>
<td>Black</td>
<td>87%</td>
<td>72.4%</td>
</tr>
<tr>
<td>White</td>
<td>9.9%</td>
<td>17.3%</td>
</tr>
<tr>
<td>Asian</td>
<td>.6%</td>
<td>1.4%</td>
</tr>
<tr>
<td>Hispanic (Any Race)</td>
<td>1.6%</td>
<td>7.1%</td>
</tr>
<tr>
<td><strong>BROADMOOR</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Population</td>
<td>7,232</td>
<td>5,381</td>
</tr>
<tr>
<td>Black</td>
<td>68.2%</td>
<td>61.1%</td>
</tr>
<tr>
<td>White</td>
<td>25.8%</td>
<td>28.8%</td>
</tr>
<tr>
<td>Asian</td>
<td>.6%</td>
<td>1.0%</td>
</tr>
<tr>
<td>Hispanic (Any Race)</td>
<td>3.7%</td>
<td>6.7%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>2000</th>
<th>2011-15</th>
</tr>
</thead>
<tbody>
<tr>
<td>People living in poverty</td>
<td>11.2%</td>
<td>16.5%</td>
</tr>
<tr>
<td>People living above poverty</td>
<td>88.8%</td>
<td>83.5%</td>
</tr>
<tr>
<td>People living in poverty</td>
<td>16.1%</td>
<td>22.1%</td>
</tr>
<tr>
<td>People living above poverty</td>
<td>83.9%</td>
<td>77.9%</td>
</tr>
<tr>
<td>People living in poverty</td>
<td>49.8%</td>
<td>46.1%</td>
</tr>
<tr>
<td>People living above poverty</td>
<td>50.2%</td>
<td>53.9%</td>
</tr>
<tr>
<td>People living in poverty</td>
<td>31.8%</td>
<td>24.9%</td>
</tr>
<tr>
<td>People living above poverty</td>
<td>68.2%</td>
<td>75.1%</td>
</tr>
</tbody>
</table>

Source: New Orleans Planning Commission & The Data Center (https://www.datacenterresearch.org/)
Listening Post starts on the ground before it becomes digital. Hardman asks residents questions about different local issues through signage and text messages. He places signs with these questions and a phone number to call or text responses. In 2013, when he first arrived in New Orleans, he created and administered an information needs survey at parades, art markets, basketball games, donut shops, barber shops etc. focusing on majority minority neighborhoods. He asked: 1) What kind of devices do you have? 2) What do you wish you understood better about the city? and 3) Do you want to participate in sharing your own story?

He surveyed 350 respondents and it was from this research he learned that it was important to engage people through their cell phones. Hardman also placed actual listening posts in neighborhoods that are traditionally left out of the media, where people could record their answers to the questions if they stumbled upon it or did not have a cell phone. These posts were placed in Read Boulevard East, Gentilly Terrace, Central City, and Broadmoor at community or events or branch libraries. Table 3.10 shows that all these neighborhoods were and are majority African-American, but their poverty rates vary.
Currently, the physical posts do not exist because they cost too much money to maintain. The project has approximately 1,200 people in its text message database, and questions have a 5% return rate, with a mix of people responding each time. Hardman often follows up with individuals who texted or recorded responses and then stitches together all the content he receives to share stories on the radio and the Listening Post website that are more representative of New Orleans’ populations.

Examples of Listening Post questions include:

- How can neighborhoods develop without displacing black-owned businesses?
- Do you use Uber or Lyft to get around New Orleans?
- What’s missing in New Orleans?
- How much say should community members have on big industry projects?

One of the Listening Post’s most popular episodes was on the ninth anniversary of Katrina, which aired on August 28, 2014. Hardman asked listeners: “How should we commemorate Hurricane Katrina?” He discussed the difficulty in asking New Orleanians about Katrina: “So we got hundreds of people coming through and recording. I think I was worried that as a reporter here, people don’t necessarily want to keep being reminded of the worst day of their life. When it comes to a disaster it’s like, how long do you want to keep talking about that? Yet, it does filter into all aspects of people's lives and it is a part of their lives.” Individuals talked about the importance of a commemoration that focused on those who left and returned; the need for a citywide funeral for those who lost their lives because of the flooding; and further investigations of how pre-Katrina lower-income neighborhoods are faring. Hardman evaluated the success of this episode by the sheer number of diverse people (“hundreds of residents”) who shared their voice.

![Image 3.4 Examples of Listening Posts](source: The Listening Post @ WWNO)

As the photographs show, the microphones are inside decorate cardboard sculptures to catch people’s attention.

Hardman also acknowledges that for these voices to matter, somehow policymakers need to hear them. Therefore, he has designed a few episodes in which he asks listeners: “If you could ask the mayor something or if you could ask the city council members something, what would you ask them?” He then takes these questions to the city council members’ offices and conducts an interview around the crowdsourced questions on the radio. Hardman shared, “I think there’s just a nice impact
there because people feel like their voice matters, and there's a bit of holding people in position on power's feet to the fire, which I think is a constructive thing.” With regard to success, for Hardman it is most important that the information reflections the diversity of the city accurately and that these diverse audiences are listening to one another.

7. Katrinatruth.org

In preparation for the 10-year anniversary of Katrina, several non-profits and activist groups developed katrinatruth.org to share alternate narratives about recovery. Their motto: "Progress without equity is injustice." These organizations include Families and Friends of Louisiana's Incarcerated Children, Southeast Louisiana Legal Services, Vietnamese American Young Leaders Association of New Orleans, Gulf Coast Center for Law and Policy, Coalition of Community Schools, Justice and Accountability Center of Louisiana, Greater New Orleans Fair Housing Action Center, Breakout!, Rethink, Voice of the Ex-Offender, Silence is Violence, SEIU 21, Advocates for Environmental Human Rights, and the Advancement Project. The objective of the site is to discuss shortcomings of the recovery such as privatization, gentrification, and the loss of Black leadership (which includes the election of a white mayor and the loss of other Black leaders due to long-term displacement). According to one of the project managers, they believe the site has been successful because once introduced, the hashtag #katrinatruth emerged into the ether and local politicians started using the phrase “katrinatruth” (Personal Interview with Jumoke Balogen, 2016). Table 3.6 shows examples of how katrinatruth.org provides facts that do not fit into the dominant narrative.

Table 3.6 Dominant Narrative versus katrinatruth.org

<table>
<thead>
<tr>
<th>Issue</th>
<th>Dominant Narrative</th>
<th>katrinatruth.org</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education</td>
<td>As soon as Katrina hit, state officials used the event to transition to an all charter school system in New Orleans, which is believed to be one of the most rapid academic improvements in American history.</td>
<td>While 92% of students are now enrolled in charters, many charter schools have failed to accommodate students with disabilities or limited English proficiency, violating federal law and prompting civil rights complaints to federal agencies.</td>
</tr>
<tr>
<td>Housing</td>
<td>The mixed-income developments that replaced four of New Orleans’ largest public housing developments are prettier, safer, and residents are happier than before.</td>
<td>There are only 2,006 public housing units now available in New Orleans as compared to 12,270 before Katrina. Only 11% of families who lived in the Big Four developments that were torn down after the storm have returned to rebuilt complexes.</td>
</tr>
<tr>
<td>Economic Inequality</td>
<td>New Orleans has been witnessing its best job growth since the 1990s.</td>
<td>The median income for Black families in New Orleans is</td>
</tr>
<tr>
<td>Section</td>
<td>Detail</td>
<td></td>
</tr>
<tr>
<td>-------------------------------</td>
<td>------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Black Leadership in NOLA</td>
<td>$25,102 compared to $60,553 for White families.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Racial harmony has increased in New Orleans since Katrina.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The large population of Black teachers who were displaced following Hurricane Katrina comprised a class of civically engaged, educated, self-sufficient members of the community. When many didn't return because of the loss of affordable housing and the closing of schools, the community that played a critical role in political empowerment was also lost, and with them, a key engine of black leadership in the city.</td>
<td></td>
</tr>
<tr>
<td>Criminal Justice</td>
<td>The 2012 Consent Decree between the U.S. Department of Justice will lead to necessary reforms in the city with a history of racialized policing and brutality. The prison population has declined since Katrina.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Despite the implementation of the decree, there are 5 times as many Black inmates in Louisiana prisons as Whites, even though the state's general population of Blacks is only half that of Whites.</td>
<td></td>
</tr>
<tr>
<td>Environmental Justice</td>
<td>Organizations such as the Make It Right Foundation are building 150 safe, sustainable, affordable homes in the mostly African-American neighborhood of the Lower Ninth Ward, that was mostly destroyed after Katrina. Displaced homeowners from the neighborhood have the first right to these homes.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>140,000 families were housed in toxic formaldehyde FEMA trailers after Hurricane Katrina and 2,000 truckloads of toxic waste and debris per day entered a landfill located in mostly African American/Vietnamese east New Orleans.</td>
<td></td>
</tr>
<tr>
<td>Queer and Trans People of Color</td>
<td>New Orleans is the most gay-friendly and welcoming city in Louisiana.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Twenty percent of the Louisiana juvenile detention center population is LGBTQ.</td>
<td></td>
</tr>
</tbody>
</table>
Public Lab & iSee Change

These two bottom-up journalism projects are examples of “citizen science.” Citizen science is conducted by nonprofessional scientists. At times, these amateur researchers partner with professional scientists to produce knowledge. It involves the rigorous collection of data to prove a hypothesis (Corburn, 2003). The difference between these initiatives and the aforementioned mini case-studies is that the emphasis is on quantitative data or facts rather than qualitative stories or investigations. Citizen science projects such as Public Lab and iSee Change tend to rely on the use of digital tools to track, capture, and collect information.

Both Public Lab and iSeeChange formed several years after the Katrina, and not necessarily as a response to it. Public Lab was founded in 2010 in response to the BP Oil Spill because no one was accurately tracking the effect of this disaster on the ground. Public Lab (formerly known as Grassroots Mapping) began when an informal group of concerned residents, environmental activists, and scientists attached cameras to kites and balloons to take inexpensive aerial photographs of the Gulf Coast and use the images “to assess and respond to the damage and to support possibility litigation following the spill” (Bilton, 2010). Usually, such aerial images belong to the government or private satellite companies, not to the people who live in these communities (Personal Interview with Shannon Dosemagen, 2016).

Beyond mapping, the organization develops several types of low-cost tools and sensors using open source hardware and software tools, and facilitate non-geographic communities around the development and use of these tools. In all of Public Lab’s projects, the data is open source and its uses vary. Shannon Dosemagen, the Executive Director of the non-profit, claimed that individuals and community-based organizations usually approach Public Lab and ask for technical assistance in developing a project: “A lot of times, people find us, and the success of project depends on if they used the data in the way they wanted to.”

iSeeChange, a website and mobile application that sits at the crux of both citizen science and public media to help localize the issue of climate change. It was founded by former Times-Picayune journalist, Julia Kumari-Drapkin. She explained:

...Historically scale has been the biggest challenge when it comes to communicating climate change, as well as with adapting to climate change, because we're working from large amounts of time and space and narrowing down into a single community's experience, and saying climate change is impacting us and it's different. So science has been struggling with that. And lawmakers can't really make the case to allocate adaptation funds without being able to say, 'Okay, this is how much climate change is impacting our district, our lives' (Personal Interview with Julia Kumari-Drapkin, 2006).

The project of relating the larger global phenomenon of climate change to local impacts on livelihoods and lifestyles involves a politics of scale construction and manipulation. Depending on how media coverage about climate change is framed with respect to scale, the perceived risks and
consequences can vary. iSeeChange aims to challenge normative models of environmental reporting that privilege the perspective of experts.

The digital platform is inspired by the Farmers’ Almanac, which has been published annually since 1818, with long-range weather predictions based on astronomical data. iSeeChange allows users to submit daily/weekly observations of climate and weather in their city via Internet to a website that would then archive the observations. Users can also ask questions or write comments about observed phenomena in their own post or others’ posts, to generate discussion around it. Posts can also be sorted by week, season, and year.

In 2014, iSeeChange partnered with NASA’s Jet Propulsion Laboratory to incorporate open data from the Orbiting Carbon Observatory (OCO2), the first dedicated satellite mission designed to monitor regional variations in atmospheric carbon dioxide (CO2), into user posts. The objective was to combine two different scales and types of data within climate change discourse: OCO-2 data would provide a global view of carbon dioxide levels, a greenhouse gas connected to human activity and increasing global temperatures, while user observations would continue to reveal weather and climate patterns at ground level.

The post-Katrina bottom-up journalism examples varied immensely in their relationships with other New Orleanians, their physical community, their organizational structure, and their outcomes. However, they all emphasized elevating local knowledge and many of them provided content for mainstream media. The next section details the post-Sandy bottom-up journalism examples.

**Post-Sandy**

The examples of bottom-up journalism post-Sandy are much fewer than the examples post-Katrina. This is the case for two main reasons: First, the media eco-system of the New York City and New Jersey region is much more saturated than the media eco-system of the Gulf South. Thus, journalists have more outlets to report varied stories and investigations of facts. Second, since technology and access to tools have evolved so much in the past seven years (refer to comparisons Chapter 2), mainstream media has become “a converging spectrum” (Kenix, 2011). (Though number of the NOLA examples began years after Katrina and made use of newer platforms and tools, not just was available in 2005). Mainstream media producers are using models that attempt to turn audiences into active participants. BRIC, Jersey Shore Hurricane News, and Sandy Storyline use new media tools to foster a participatory news creation culture the way Sams of the *Trumpet* or Hardman of the Listening Post did. These three examples all started for very different reasons.
1. **BRIC**

   In 1988, BRIC (then called The Fund) starts the first Public Access television station for Brooklyn, “to facilitate the creation of and access to Brooklyn-focused television programming and to nurture public participation in the creation of works” ([www.bricartsmedia.org](http://www.bricartsmedia.org)). After Hurricane Sandy, BRIC created a live daily show, called BK Live. According to Kuye Youngblood, the Head of Development and Production at BRIC, after Sandy there were many people in Brooklyn searching for local news, and found their way to a TV somehow. Because watching television is a communal activity, this was an easier way to get information than the Internet, which tends to be a more solo activity relying on power. Of course, television relies on power too, but often restaurants, bars, library branches, or other communal gathering places have access to generators, which restored power and allowed communal television watching to occur. This phenomenon of crowding around a public television is what inspired BKLive – a show to get urgent information and facts about the disaster out to the public. Jonathan Lief, Executive Producer of BK Live stated, “We try to be the immediate voice of the voiceless and cover stories that are not in the media landscape. BKLive [was and] is a mix of live studio interviews and video packages” (Personal Interview with Jonathan Lief, 2016). Unfortunately, these segments were not archived on the organization’s YouTube channel for analysis.

2. **Jersey Shore Hurricane News**

   Justin Auciello, a native resident of Seaside Heights in New Jersey, founded Jersey Shore Hurricane News (JSHN) on Facebook and Twitter in August 2011 shortly before Hurricane Irene. After Irene, Auciello operated continuously including during and after Superstorm Sandy. The Facebook page allowed residents of Ocean County and Monmouth County, to quickly receive and share updates about local emergencies and disasters as soon as possible. As of 2016, both counties

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45 Approximately 2 million people lost power at some point during the storm (*Sandy and Its Impacts*).

46 The main platform for JSHN is Facebook, but Twitter is used as a supplement to inform people about new Facebook posts.
were predominantly White, 93% and 84.6% of the total population, respectively. Both counties also have low poverty rates of 12.7% and 7.5% of the population, respectively (U.S. Census).

An urban planner and consultant by day, Auciello saw that he could learn faster about the places and neighborhoods he worked in via social media than any traditional news outlet. He started JSHN for this reason: “Now people don’t have to wait until a reporter does a six-paragraph story or rundown of what’s going on.” And beyond information exchange, the Facebook page allowed people to access resources and networks needed to survive.

From the start, Auciello used the crowds on social media as contributors, stating that JSHN was, “for the people, by the people.” He takes the job of fact-checking very seriously. “Rumors run wild during disasters and that is not useful to anyone. I have never published something that I haven’t verified one way or another.”

Auciello responds to every single message or post from his followers and confirms evidence from their stories even during a crisis, when he may receive hundreds of messages in a day. Throughout Hurricanes Irene and Sandy, followers shared a lot of mixed media with Auciello from text stories, photos, and videos. Often this content would conflict with one another, and Auciello would not post the information until he investigated its credibility (Auciello, 2017). Even now, he drives to the areas where he is told something urgent is happening to verify the “news” he was given or he makes dozens of phone calls to the appropriate agencies or stakeholders to validate claims.

He also credits contributors publicly when he posts content they provide. Over 1,000 unique individuals have provided information for the JSHN Facebook page (Auciello, 2017). Residents of Ocean and Monmouth County that follow JSHN on Facebook rely on Auciello for the truth (O’Donovan, 2013). Auciello’s focus on fact-checking has helped build community, which he sees as the greatest success of his JSHN endeavor. Auciello explained, Communities I think will easily form when they know that they can trust the information that’s coming from it. They're going to be more willing to contribute”

The New Jersey Office of Emergency Management (OEM) became concerned that Auciello himself would spread incorrect information during crises and asked to meet with him after Hurricane Irene. Members of the agency were so impressed with the veracity of his posts and his large following that they asked to partner with JSHN to broadcast information. When Sandy hit the Jersey Shore,
Auciello had an established relationship with OEM. Thus, when he received messages that said, “Help! I’m stuck!” or “I think I might die!” he would immediately contact the OEM who would then respond to the individual on Facebook or Twitter and offer assistance (McKenzie, 2014).

At first, people began liking the page through word of mouth, and then individuals would tag their friends in comments to posts, which increased the number of followers. After Hurricane Irene, Auciello continued to operate the page and offered updates on daily life, human interest stories, traffic, weather, and posted content from contributors such as photographs of local happenings or sunrises and sunsets. Furthermore, Auciello emphasized that he is not an advocate or an activist. “I see myself more as an objective traditional reporter,” he said. Prior to Hurricane Sandy, the JSHN Facebook Page had collected 65,000 followers. Then after the storm, the number increased to 180,000 mostly through word of mouth. Currently, there are over 250,000 people on Facebook that interact with the JSHN Facebook Page, and on Twitter, there about 11,000 followers.47

Auciello wants to expand JSHN to other platforms so he can reach more residents. He started using the hashtag #JSHN on Instagram through which a community of photographers formed. While these artists connect over their images virtually and in person, many will also be ready to cooperate with one another when there is a disaster (Auciello, 2017). Aside from social media, Auciello is also interested in experimenting with radio. Inspired by the Listening Post in New Orleans, he contacted founder and journalist Jesse Hardman to brainstorm how JSHN could use radio to reach the elderly or others who are not on social media. Auciello described how traditional mainstream media platforms focus on stories from the Jersey Shore when it is the anniversary of a tragedy, but the difficulty to rebuild life is ongoing and that’s not covered properly. “So the hope is people like Justin, a more local person, follow the stories better,” explained Hardman.

Most grassroots media efforts struggle with financial sustainability and JSHN is no different. Auciello is not paid for his work on JSHN nor are the various contributors compensated. He did receive a $25,000 grant from the New Jersey Recovery Fund in June 2013, which he used to hire part time help for curating stories. Auciello is determined to stay true to his original vision: “We’re not your corporate news outlet who only cares about money. I have zero interest in [scaling up] because if I start going away from local, then the whole ethos behind it just gets ruined.”

He believes that he is inadvertently providing free labor to professional journalists who have often unethically published his Facebook content without permission or credit. “[JSHN] changed mainstream media because professionally trained reporters were able to mine it for tips and information and make money off it. The irony was I was doing all the work and I wasn’t making any money, but they were making money by taking my information”, asserted Auciello. JSHN facilitates

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47 Auciello noticed that 7 out of the 10 Facebook and Twitter followers are women in their mid 20s to mid 30s. His theory about this trend is that these are women with families that appreciate high-frequency updates to appropriately care for their children.
more visibility for Jersey Shore residents and their issues in well-read newspapers across the state, but in doing so exploits Auciello and contributors. This trend points to an interesting dilemma when evaluating the success of grassroots media efforts (Auciello, 2017).

3. Sandy Storyline

Michael Premo and Rachel Falcone are filmmakers who were deeply engaged members of Occupy Wall Street and the founding members of Occupy Sandy. Premo described activating Occupy Sandy through “social networking, not technological networking.” After the storm, he was constantly on his phone spreading and obtaining information through calls, texts, and social media with his contacts from Occupy Wall Street. Falcone explained that Sandy Storyline developed simultaneously alongside the growth of Occupy Sandy.

Both individuals spent the first week after Superstorm Sandy volunteering and organizing inside the Red Hook Initiative building on Hicks Street, which became an emergency resource hub in the neighborhood since the structure retained power. Occupy Sandy also made this location one of their neighborhood hubs. Falcone recalled how countless number of residents would come through the building each day to charge their phones and other devices. It was at these charging stations that people would openly share their stories and experiences with the storm.

Because Falcone brings her digital recorder with her wherever she goes, she would request permission from individuals to record their narratives. “Just in the charging station, there were dozens and dozens of people with different experiences of the storm. I felt there’s no way we could tell all these stories. I wanted to tell them in a more collaborative way,” recollected Falcone.

Sandy Storyline grew out of Housing is Human Right, a collaborative storytelling project about foreclosures and homelessness, which Premo and Falcone had organized using a web-based microblogging platform invented at MIT, vojo.co. Vojo.co allows users to set up an account for free and then anyone can SMS, call, or manually enter written, audio, and visual stories using the page’s automatically generated unique phone number or email address. Premo and Falcone then use the content to create mini-documentaries. Drawing from their previous work about foreclosures and homelessness, Falcone created the Sandy Storyline page on vojo.co. She asked herself, “What is powerful storytelling at this moment? What is the media not getting? How do you collaborate with millions of people to tell a story?” Premo responded, “There’s this public perception that it’s chaos, and it's looting, and it’s pandemonium. But it’s not, it’s not actually what happens.” The main purpose of Sandy Storyline was to provide an accessible platform to collect the diversity of experiences with the storm and stitch together “a multidimensional truth” (Personal Interview with Michael Premo and Rachel Falcone, 2017).

Additionally, it was important to Premo and Falcone that the project have an aesthetic standard. It was not just about amplifying voice, but also packaging that voice in a way that elevated legitimacy (Premo and Falcone, 2017). “It’s important that someone's cell phone image looks as beautiful as a professional portrait. We really wanted people to see themselves as beautiful after this,
and know if we put their story up, it’s not going to look like a bunch of junky text. We set an aesthetic standard that then people could fit themselves into. Then when people contributed they knew their story would be shared in a certain way,” detailed Falcone.

Image 3.5 Storyline Page with several modes to send a story.

The reason the duo named the project “Storyline” was to emphasize connection. “You see [participants] might have different geographic or gender or ethnic identities. But still you can see a story that resonates with you,” explained Falcone. The platform itself, vojo.co, helped attract a diverse set of contributors. For example, elders that would never go online submitted voicemails (Premo and Falcone, 2017). The project had a physical component as well. Premo and Falcone set up an installation at the New York Public Library (NYPL) and several branches throughout Brooklyn in which individuals could see and listen to stories as well as submit their own through writing or recording. They partnered with a program, the Coney Island Generation Gap, which is a media arts program for moderate to low-income youth in the neighborhood. The program lost all of its equipment during Sandy. Premo and Falcone used their Occupy networks to obtain recorders and taught young people how to produce audio stories for six months, which are all featured on Sandy Storyline.

Over 100 Occupy Sandy members volunteered their time to make Sandy Storyline possible from recruiting individuals to producing curriculums about developing a story to obtaining audio visual equipment to providing tech support and editing. Six months after the storm, when the Storyline team was at its largest, the project was able to produce a large number of pieces quickly and created a whole installation exhibit at the Tribeca Film Festival. It won the first ever Bombay
Sapphire Award for Transmedia in 2013. “That was critical, also because we brought some media attention to Sandy issues,” said Premo. “After this, journalists call us every day asking for leads.”

One of the biggest successes of the project is a direct policy change that came from a set of narratives (Premo and Falcone, 2017). For example, 160 residents of the adult-care facility, Belle Harbor Manor, were evacuated on October 30\textsuperscript{th}, the morning after the storm hit. These residents spent the next 3.5 months in temporary shelters, including the Milestone Residence, which was a halfway house on the grounds of the sprawling and partially abandoned Creedmoor Psychiatric Center. “It was harrowing,” said one of the displaced residents who also recalled that several of the Belle Harbor Manor tenants experienced deteriorations in their mental health as a result of their institutionalized stay at Milestone (sandystoryline.org). An Occupy Sandy housing advocate worked with Sandy Storyline to investigate the situation and help the residents get vouchers by appealing to local council person.\textsuperscript{48}

Sandy Storyline is still collecting stories today even though there is a huge slowdown due to funding and lack of volunteers. Premo and Falcone hope that their project will help people learn how to cope with the next storm better: “I think one thing that I realized early on though, you obviously want [Storyline] to have meaningful change on the storm itself, but at a certain point, you have to realize that there's only so much that you can do in the current disaster. You realize that a lot of the policy goals are for the next one.”

**Investigate: Conclusion**

Key themes emerge from these very diverse Bottom-Up Journalism mini-cases across the city. The examples either consist of one resident taking on the role of professional journalist for a geographic community (neighborhood, city county) or one resident taking on the role of collecting stories from others within a community. The latter activity is also a form Crowd-Sourced Deliberation, an upcoming category in the typology. Several of the examples demonstrated how the flow of information traveled across mediums from social media to a bulletin board, or cameras to digital maps or a newspaper to the Internet, highlighting the media ecology of different places and non-spatial communities. Every single endeavor struggled financially, and some supply mainstream media information free of cost. In some sense, this is a success because it broadens awareness and recognition about specific issues.

The mini-cases also highlighted two trends: 1) the importance of trustworthy networks for disaster preparedness and resilience (Cutter, 2015) and 2) how ICTs facilitate the gathering of people in physical space for the purposes of obtaining information. With regard to the first point, several of the media makers discussed how they are seen as a reliable source of information and for that reason have the power to activate members of their community in a crisis situation. Even more, the

\textsuperscript{48} This activity is an example of the next category “Organize for Place.”
organizing of people to submit their stories led to a network each member could count on in a disaster. Whether it was around a flying balloon camera, a television, a listening post, or a charging station, ICTs brought people together with the common goal of uncovering local knowledge. Lastly, I provided basic demographics for the neighborhood or county-level initiatives to evaluate how inclusive effort were in terms of socioeconomics. Aside for Timolyn Sams, the founders of all these projects were white, even if they served minority communities.
Organize for Place: Incite

This category refers to individuals, community groups, or non-profit organizations that use information communication technologies for the purposes of carrying out actions collaboratively or coming together to achieve a goal in physical space. It is not just about sharing information or systematically collecting information, but rather using said information to intervene and improve a place by inciting action. This is a form of collective efficacy, which Robert Sampson (2006) describes as “the process of activating or converting social ties among neighborhood residents in order to achieve common goals. However, community media in this category is not necessarily about triggering neighborhood ties, but activating any social network.

Several researchers critique Putnam’s view that participation in civic life from voting to trust in government to membership in parent-teacher associations to attendance at public meetings, has declined dramatically from 1975 to 1998. They claim that the organizational locus of civic engagement has changed, and that civic life is structured around advocacy groups, professional associations, and Internet-mediated spaces, none of which were represented in his analyses (Wellman, 2001; Sampson et al, 2005). In fact, Sampson and his colleagues, ask, “What does it matter if people are part of social organizations unless it translates into collective action [in physical spaces]?” (Sampson et al, 2005, p. 674) The researchers analyzed 4,000 collective action events in Chicago public spaces from 1970-2000 (approximately the same timeline as Putnam’s dataset), and discovered the emergence of a previously overlooked phenomenon, blended action, which is a combination of a stated claim or protest with a public event, one form of collective efficacy. Although classic social movement protests have decreased since 1970, the number of blended actions increased significantly.49

While Sampson and his colleagues do not discuss the role of ICTS in facilitating such events, and attribute the rise of blended actions to the density of non-profit organizations (Marwell, 2004), I present this study because I hypothesize that the increase in blended actions are also partially attributed to the proliferation of ICTs and social networking, as well as community media. While social media did not exist during the time-period of the data collection, the Internet still played a role in connecting people. Information communication technologies have the ability to help foster collective identity and “a perception among individuals that they are members of a larger community by virtue of the grievances they share” (Garrett, 2006. p. 6).

This phenomenon occurred through blogging post-Katrina. Additionally, most of the scholarship regarding social media and collective action asserts that the Internet provides the space for people to have flexible or “weak tie” relationships, enabling individuals to interact without the

49 The study shows that the number of civic events appeared to have increased slightly as well, which does not support Putnam’s assertion.
need for central coordination such as Occupy Sandy. Thus, actions become leaderless, horizontal, open, and spontaneous (Castells, 2007; Brabham, 2009).

For example, official neighborhood groups in NOLA used web-based platforms such as Yahoo Groups to debate and mobilize around redevelopment plans. In the two years following the flood, approximately 148 new blogs emerged on the Internet after Hurricane Katrina (between September 2005 and December 2007) (Ortiz and Ostertag, 2014). At least 27 of these blogs referenced Hurricane Katrina in their publication titles. These bloggers formed the Rising Tide conference at Xavier University in New Orleans in 2006 and have met every year since (for ten years) to discuss collective action through the Internet. As discussed in the Inform category, Occupy Sandy used social media to successfully organize over 60,000 volunteers in neighborhoods throughout New York City. The collective’s first Facebook post from November 1st, 2012 reads:

If you see a need in your community, work to fill it. We will do everything we can to support your efforts! Find like minded folks, band together, and pool your resources. Start with finding a donation drop off location. Then find a local certified kitchen that will donate their space. Ideal if both are located in the same building. Go door to door. Meet your neighbors. Reach out to local churches, schools, community centers, and businesses. If you can do it, we can too! All Power to the People. Rock on, NYC.

Whether it was through blogging, discussion forums, websites, or social media, the Internet played a crucial role in helping people communicate with the purpose of taking some sort of action to achieve a place-based goal, whether it was around a neighborhood, city, or county.

Table 3.12 Organize for Place Examples

<table>
<thead>
<tr>
<th>POST-KATRINA</th>
<th>POST-SANDY</th>
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<tbody>
<tr>
<td>Rising Tide (Blogs)</td>
<td>Occupy Sandy Social Media</td>
</tr>
<tr>
<td>Neighborhood Yahoo Groups</td>
<td>Red Hook Twitter</td>
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<tr>
<td>in NOLA</td>
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<tr>
<td>Levees.org</td>
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</table>

**Post-Katrina**

Blogging and digital discussion forums allowed dispersed residents to find one another, build and strengthen social ties, move relationships offline, and eventually participate in some sort of civic action. Blogging and the Rising Tide conference that formed from it was not bound to a specific geography other than the City of New Orleans and the surrounding areas. While non-New Orleanians could certainly access these writings (and many non-local journalists did), most bloggers did not necessarily have an “outside” audience in mind though several people have discussed an urge to correct national news as a goal (Ostertag and Ortiz, 2015). Rising Tide was a hyperlocal conference and the participant of the first one were mostly returned New Orleans residents (Ostertag and Ortiz,
Meanwhile, the organizing work completed via Levees.org was completely targeted at state and federal officials. While the advocacy work was aimed at improving New Orleans and the Gulf region, the communication needed to be outward in order to achieve the policy goals Rosenthal from Levees.org set forth.

Table 3.13 Timeline of Organize for Place Examples Post-Katrina

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<tbody>
<tr>
<td>RISING TIDE</td>
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<td>YAHOO GROUPS</td>
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<tr>
<td><strong>INTERNAL</strong></td>
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<tr>
<td><strong>INTERNAL/EXTERNAL</strong></td>
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1. **Rising Tide (Blogs)**

After Hurricane Katrina, many displaced residents created blogs at first “to communicate personal stories, to vent their frustrations, and inform those not familiar with the city of important news and information not available in the national press, and to make corrections and provide context to the national news that was available” (Ostertag and Ortiz, 2015, p. 36). Eventually, blogging served as a digital mobilizing structure or network that afforded a group of scattered people the possibility to develop a community based on a collective identity organized around their blogging, and the collective efficacy necessary for engaging civic actions (Ortiz and Ostertag, 2014).

Bart Everson, also known as B-dot-ROX, is an avid New Orleans blogger at brox.com. He taught Karen Gadbois of Squandered Heritage and The Lens how to blog when she decided to take up the activity. He lived in the Mid-City neighborhood at the time of Katrina. Everson began blogging in 2004 well before Katrina, and believed that blogs proliferated after the crisis because “truth was the first casualty” and everyone was “desperate for information” (Personal Interview, Everson, 2016).

Therefore, these informal self-published web posts served as news for locals and others. Whether the blogger had returned to their home or was writing from afar, everyone had some sort of local knowledge, opinion, thoughts, or questions to share. Journalist Cynthia Joyce (2015) and editor of the anthology Please Forward: How Blogging Reconnected New Orleans after Katrinaexplained: “What made the New Orleans blogosphere so robust post-Katrina was its newfound

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50 This book is a collection of blog posts related to Katrina from 2005-2007. While some of the writing included is famous and easily obtainable, a good percentage of the work is also difficult to locate due to aging servers and broken links. As Joyce explained in the book, the Internet is not forever. The pieces show how the Internet served as a critical platform in a time of crisis.
mission of enforcing a kind of crowd-sourced accountability. That kind of constant, unrelenting scrutiny had never before been applied with such force, or such precise focus” (Joyce, 20).

Everson (2016) described how this Internet information sharing activity facilitated a community among the bloggers: “It seemed like there was a new blog popping up every day, and we were all reading each other, and informing one another and learning from one another. And so that formed a kind of community that did not exist pre-Katrina.” Joyce refers to the different social groups that formed through blogging as “cabals.” Bloggers found each other through Web search engines or learned about other blogs through comments on their own posts. As bloggers stumbled upon new blogs, they would link to it in their posts, and that was another way readers would come across these self-published spaces (Ortiz and Ostertag, 2014; Everson, 2016).

One blogger described how it was these strangers on the Internet that helped carry him through the chaos of Katrina, and as people began returning to the city there was this motivation to meet in person. The 2006 Mardi Gras parades was one of the first public encounters for bloggers. From there, individuals began organizing monthly potluck “Geek Dinners” at one another’s homes (Ortiz and Ostertag, 2014; Everson, 2016; Gadbois, 2016). Through this process, the bloggers achieved collective efficacy. Bloggers connected with one another digitally, established ties, and built an informal collective that eventually engaged in resistance on the ground in New Orleans. Blogging facilitates immediate and lasting communication, and allows for one-to-many or many-to-one exchanges without simultaneous presence in time and place.

Katrina bloggers’ civic actions encompassed two main themes: 1) protesting the national media representations that incorrectly portrayed and threatened the identity of New Orleanians and 2) holding government authorities accountable for the city’s recovery (Ortiz and Ostertag, 2014). And accordingly, these civic actions took three different forms: 1) protests; 2) blended social actions, which are a combination of a stated claim or protest with a public event (Sampson, 2005); and 3) the creation of new civic organizations. For example, in late December 2006 and early January 2007, there were two murders that occurred in the city that sparked a march against crime and violence at City Hall on January 11, 2007 with over 5,000 participants (Ortiz and Ostertag, 2014). Through their writing, Katrina bloggers created momentum for the event and sustained the energy from it after the march. Two of the eleven speakers at the event were Katrina bloggers. Also, many bloggers shared the sentiment Everson wrote in his post on January 11, 2007:

Leaders, you need to do something that many of us think
you can’t do. You need to be honest. You need to admit
that what you’re doing isn’t working, and plan a return to
ture community policing... We know that law enforcement
alone can’t solve these problems. We need long-term solutions
too. It will take all of us. It will take community involvement.
Well, look around. The community IS involved. And we still stay
involved. To our political class: You’re on notice. We will be watching.
It was on the first anniversary of Katrina that bloggers Scout Prime of *First Draft* and Mark Moseley also known as Oyster of *Right Hand Thief*, organized a convention or a conference called “Rising Tide,” which can be characterized as a blended social action. The name of the conference was inspired by John Berry’s famous book about the 1927 flooding in New Orleans. On July 5th, 2006, Moseley wrote in a blog post:

Katrina Bloggers Activate! Form of...a convention in New Orleans! Think of it: bloggers from all over could get together, and talk about the Katrina aftermath, and blog, and argue, and party, and share information, and podcast, and effect political change, and meet each other in person, and have a “work day” in a flooded neighborhood, and actually do something, and have panels and guest speakers and t-shirts and stickers, and we could get some press and everyone would leave feeling really good about their experience in New Orleans, and would blog about it, and want to do it again...

The post generated a lively discussion in the comments section among 16 different individuals. The idea behind the conference was that it would be “a rising tide of blogs, bloggers, and community-based media” (Everson, 2016). The event was open to anyone interested in attending, not just bloggers. Rising Tide has occurred annually for ten years from 2006 – 2015, growing in size, and changing themes each year:

*Rising Tide 1:* “Unfatigued” – focused on the influence of bloggers and journalists on post-Katrina New Orleans

*Rising Tide 2:* “No Holding Back” – focused on writing about local politics

*Rising Tide 3:* “Attack of the Cranes” – focused on the past, present, and future of elementary/secondary education in New Orleans; presentation on Levees.org’s “The Katrina Myth”

*Rising Tide 4:* “Sinking to New Heights” – Panel discussions on culture, politics, healthcare, and sports as well as a Beyond Jena mini-conference about the rise of blogging and grassroots media as tools for social justice in New Orleans and beyond.

*Rising Tide 5:* “Crude Awakening” – focused on public safety in New Orleans

*Rising Tide 6-10:* These conferences did not have titles, but focused on how digital media can and does affect the future of city. Rising Tide included famous guest speaks such as David Simon, the producer of HBO’s series, Treme; DeRay Mckesson of Black Lives Matter.

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51 Everson told me that when the idea for Rising Tide was formed in 2006, the founding members decided that it would be a ten-year endeavor. One of the founding members passed away, and as time passed and the use of technology was organizing became more normal, it seemed the conference was not needed anymore.

52 Beyond Jena refers to The Jena Six case in which six black teenagers in Jena, Louisiana who were convicted of beating a white classmate at the local high school in 2006. Initially, these high-schoolers were charged with attempted second-degree murder. The case prompted a huge protest on September 20, 2007 in which approximately 20,000 people marched in Jena asserting that the students were given an excessive and racially-discriminatory charge. The resistance was partly facilitated by digital activism (https://cat.xula.edu/beyondjena/).
Lastly, *The Lens*, which was discussed in the Bottom-Up Journalism section, is an example of a new civic organization that formed from blogging. Along with investigative reporting, the organization has hosted a number of salons or community meetings in different locations across the city around issues facing residents as potential catalysts for action.

It is important to note that the majority of Katrina bloggers were white, middle-class people, even though they were often writing about advocating for minorities in New Orleans (Everson, 2016; Ortiz and Ostertag, 2014). In their study Katrina bloggers, Ortiz and Ostertag found that 21 out of the 27 bloggers in their sample were White and 21 of 27 bloggers had incomes above $40,000. Just 4 out of the 27 bloggers were African-American. Everson reflected on the demographics of bloggers, and told me that in 2009, Xavier University hosted a conference called “Beyond Jena: A Forum on Bloggers of Color, Education and Social Justice in New Orleans.” According to Everson, the blogosphere does not represent the racial reality of the city “because it seems like there should be more given the demographics” (Everson, 2006). More than digital divide, this may be a reflection of media literacy differences between racial groups in New Orleans.

2. **Neighborhood Yahoo Groups in NOLA**

Aside from just blogging at brox.com, Everson also started the Mid-City Neighborhood Organization (MCNO) Yahoo Group\(^53\) in April 2006 to support planning and recovery among neighbors. As a critical mass of homeowners returned to the neighborhood in early 2006, they were either living in their homes’ upper floors or in other parts of the city, and needed a way to communicate with one another as they planned for the future of Mid-City (Seidman, 2013). Using their Yahoo group, the MCNO developed its own plan, wrote, revised, as well as published the plan on their organizational website.

The City Council adopted the final version as part of the Unified New Orleans Plan (UNOP), which was established because both the City of New Orleans and the Louisiana Recovery Authority needed such a document to receive federal and state aid (Wagner, 2010). The highly detailed UNOP included input from individuals, neighborhood councils, the Mayor’s Bring New Orleans Back Commission, FEMA, and the City Council’s Neighborhood Planning Initiative also known as the Lambert Plan. Digital communications made it possible for a critical mass of residents of some neighborhoods to mold and provide feedback on localized components of UNOP.

Because the Yahoo Group was the primary way for residents to organize and participate in local decision-making, the MCNO prioritized opening a new library branch that provided Internet access so residents could easily access the conversations (Wagner, 2010; Everson, 2013). Unsurprisingly, access and usage of web-based communication such as Yahoo Groups has been uneven based on race and income (Wagner, 2010). Nonetheless, as seen in Table 3.14, residents

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\(^53\) Yahoo Groups was founded in 2001 and was one of the first online discussion boards.
from several varied neighborhoods used the digital forum to discuss community issues and organize action around said challenges.

Other neighborhood or geographically-anchored Yahoo Groups that emerged post-Katrina include: Faubourg St. John Neighborhood, Katrina St. Bernard, Gentilly After Katrina, Rebuild Lakeview, Historic Faubourg Treme Association, and Rebuild Vista Park. Some of these forums are still active today or have migrated to other platforms such as NextDoor. After Katrina, resident used Yahoo groups to organize protests and marches at City Hall, facilitate hyperlocal events, form and deliberate neighborhood plans as part of the Unified New Orleans Plan (UNOP), and discuss policy and related paths for advocacy.

Table 3.14 displays five neighborhoods in New Orleans and 1 neighboring parish (St. Bernard) that used Yahoo Groups after the flood with descriptive statistics that point to how active and how many people participated in the forum respectively. The selected excerpts from the Yahoo Group discussion demonstrate the variety of ways the digital space facilitated action in physical space from questioning zoning codes to starting conversations about city policy to checking up on a neighbor.

54 NextDoor is a free private social network for neighborhoods launched in 2011. According to the website, 152 New Orleans neighborhoods are on the platform. One of the big differences between Nextdoor and other services like Yahoo or Facebook groups is ability to see each member’s address [[which address? Chosen by participant home, work, other?]]. “The platform has the potential to bring out the best and worst in communities – it brings neighbors closer together, but can amplify their worst fears – and its focus on neighborhoods makes it a particularly valuable tool for law-enforcement agencies that want to understand the concern of particular area in a city” (Waddell, The Atlantic).

55 A parish is administrative district similar to a county.

56 Due to the scope of this project, I could not analyze how many unique users were making posts. This list is comprehensive and representative of neighborhoods in New Orleans that used Yahoo Groups, but there were several other non-geographic entities that used the digital space too.
Table 3.14 Neighborhood Demographics

<table>
<thead>
<tr>
<th>FAUBOURG ST. JOHN</th>
<th>2000</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>4,861</td>
<td>3,529</td>
</tr>
<tr>
<td>Black</td>
<td>67.8%</td>
<td>49%</td>
</tr>
<tr>
<td>White</td>
<td>26.7%</td>
<td>41.5%</td>
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<tr>
<td>Asian</td>
<td>.9%</td>
<td>.9%</td>
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<tr>
<td>Hispanic (Any Race)</td>
<td>3.2%</td>
<td>6.3%</td>
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<tr>
<td>2000</td>
<td>2011-15</td>
<td></td>
</tr>
<tr>
<td>People living in poverty</td>
<td>32%</td>
<td>25.5%</td>
</tr>
<tr>
<td>People living above poverty</td>
<td>68%</td>
<td>74.5%</td>
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</table>

<table>
<thead>
<tr>
<th>ST. BERNARD</th>
<th>2000</th>
<th>2010</th>
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<tbody>
<tr>
<td>Population</td>
<td>6,427</td>
<td>974</td>
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<tr>
<td>Black</td>
<td>97.7%</td>
<td>90.6%</td>
</tr>
<tr>
<td>White</td>
<td>1.1%</td>
<td>4.6%</td>
</tr>
<tr>
<td>Asian</td>
<td>0</td>
<td>.1%</td>
</tr>
<tr>
<td>Hispanic (Any Race)</td>
<td>.8%</td>
<td>2.8%</td>
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<tr>
<td>2000</td>
<td>2011-15</td>
<td></td>
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<tr>
<td>People living in poverty</td>
<td>66%</td>
<td>43.4%</td>
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<tr>
<td>People living above poverty</td>
<td>34%</td>
<td>56.6%</td>
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<tr>
<th>LAKEVIEW</th>
<th>2000</th>
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<tr>
<td>Population</td>
<td>9,875</td>
<td>6,394</td>
</tr>
<tr>
<td>Black</td>
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<tr>
<td>White</td>
<td>24.9%</td>
<td>15.3%</td>
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<td>Asian</td>
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<tr>
<td>Hispanic (Any Race)</td>
<td>3%</td>
<td>3.8%</td>
</tr>
<tr>
<td>2000</td>
<td>2011-15</td>
<td></td>
</tr>
<tr>
<td>People living in poverty</td>
<td>16.1%</td>
<td>22.1%</td>
</tr>
<tr>
<td>People living above poverty</td>
<td>83.9%</td>
<td>77.9%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>GENTILLY TERRACE</th>
<th>2000</th>
<th>2010</th>
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</thead>
<tbody>
<tr>
<td>Population</td>
<td>10,542</td>
<td>8,210</td>
</tr>
<tr>
<td>Black</td>
<td>69.7%</td>
<td>77.8%</td>
</tr>
<tr>
<td>White</td>
<td>24.9%</td>
<td>15.3%</td>
</tr>
<tr>
<td>Asian</td>
<td>.5%</td>
<td>.4%</td>
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<tr>
<td>Hispanic (Any Race)</td>
<td>3%</td>
<td>3.8%</td>
</tr>
<tr>
<td>2000</td>
<td>2011-15</td>
<td></td>
</tr>
<tr>
<td>People living in poverty</td>
<td>16.1%</td>
<td>22.1%</td>
</tr>
<tr>
<td>People living above poverty</td>
<td>83.9%</td>
<td>77.9%</td>
</tr>
</tbody>
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<tr>
<th>GENTILLY WOODS</th>
<th>2000</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>4,387</td>
<td>2,817</td>
</tr>
<tr>
<td>Black</td>
<td>68.5%</td>
<td>69.3%</td>
</tr>
<tr>
<td>White</td>
<td>24.8%</td>
<td>23%</td>
</tr>
<tr>
<td>Asian</td>
<td>2.7%</td>
<td>4.3%</td>
</tr>
<tr>
<td>Hispanic (Any Race)</td>
<td>2.4%</td>
<td>2.2%</td>
</tr>
<tr>
<td>2000</td>
<td>2011-15</td>
<td></td>
</tr>
<tr>
<td>People living in poverty</td>
<td>14.4%</td>
<td>17.8%</td>
</tr>
<tr>
<td>People living above poverty</td>
<td>85.6%</td>
<td>82.2%</td>
</tr>
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</table>

Figure 3.7 New Orleans Neighborhoods (Left)

Table 3.14 Neighborhood Demographics (Right)

Figure 3.8 Example Mid-City Yahoo Post (7.4.06)
<table>
<thead>
<tr>
<th>Neighborhood</th>
<th>Founding</th>
<th>Last Year of Operation</th>
<th>Members</th>
<th>Excerpt</th>
<th>Posts per month between founding-2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faubourg St. John Neighborhood</td>
<td>September 2000</td>
<td>2017 – still active; averaging 72 posts per month for the year.</td>
<td>400</td>
<td>One must pay a $10 individual fee or $15 household fee to join the group.</td>
<td>Average = 176 Max = 660 Min = 58 Median = 114</td>
</tr>
<tr>
<td>Katrina St. Bernard</td>
<td>September 2005</td>
<td>2010</td>
<td>83</td>
<td>“Tina Burke lived on Jupiter Dr. in Chalmette. Unfortunately, the last contact was on Sunday. We don’t have any information as to whether or not she has been rescued, we think she may have retreated to her attic but don’t know if she had anything to break through the ceiling with. If anyone can check her house or hears anything please comment. Thanks.”</td>
<td>Average = 6 Max = 17 Min = 0 Median = 4</td>
</tr>
<tr>
<td>Rebuild Lakeview</td>
<td>September 2005</td>
<td>2015</td>
<td>949</td>
<td>“If Ben Franklin HS is turned into a general-purpose school in January, it will be one more reason for me not to bring my children back to New Orleans.”</td>
<td>Average = 1,394 Max = 2,538 Min = 559 Median = 1,360.5</td>
</tr>
<tr>
<td>Group</td>
<td>Year</td>
<td>Year Range</td>
<td>Posts</td>
<td>Date</td>
<td>Notes</td>
</tr>
<tr>
<td>--------------------------------------</td>
<td>--------</td>
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<td>-------</td>
<td>-----------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Gentilly After Katrina</td>
<td>September 2005</td>
<td>2015</td>
<td>554</td>
<td>January 11, 2007</td>
<td>“Many people seem to think that it is okay to simply repair and make no effort to improve the safety of their homes because they have flood insurance and will simply make another claim the next time it floods...we must act accordingly”</td>
</tr>
<tr>
<td>Mid-City Neighborhood Organization</td>
<td>April 2006</td>
<td>2017 – not very active; averaging 8 posts per month for the year</td>
<td>728</td>
<td>May 22, 2006</td>
<td>“I have heard that the LRA will only accept plans for New Orleans that have the City Council’s stamp of approval. And with Saturday’s election, we effectively have a new city council. We need to figure this out and fast. The pressing question for neighborhood organizations: repudiate or participate?”</td>
</tr>
<tr>
<td>Historic Faubourg Treme Association</td>
<td>June 2006</td>
<td>2017 – still active; averaging 9 posts per month for the year</td>
<td>178</td>
<td>July 17, 2006</td>
<td>“I’m also concerned about the developer's request to change the zoning from C-1 to C-2, which would allow for unlimited height on any new structures. The site is in Treme (albeit a greatly altered section of it), and ours is one of the most important historic neighborhoods in the city. Allowing very tall buildings here could damage the authenticity and character of the neighborhood. Until the plans are made available for public review, it's difficult to support or object to the proposal.”</td>
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Average = 497
Max = 858
Min = 245
Median = 473

Average = 423
Max = 706
Min = 79
Median = 493

Average = 46
Max = 147
Min = 9
Median = 43
3. **Levees.org**

Aside from educating the public about how Katrina was a manmade disaster, Sandy Rosenthal used her digital tools to incite various actions around the recovery of New Orleans. After launching the site in 2005, she digitally solicited signatures from New Orleanians for a petition to hold President Bush accountable to rebuild the city. She collected 200 signatures within twenty-four hours. Rosenthal also set up an engine on her website that allowed visitors to efficiently send letters to their member of Congress about challenges facing Katrina survivors. Levees.org assisted with the victory of several federal legislations using online letter campaigns and on the ground organizing facilitated through communication the site (levees.org). For example:

- Levees.org helped get support from Louisiana Senator Mary Landrieu for the passage of the McCain/Feingold Corps Reform Amendments in 2007, which subject any project of more than $40 million to an independent review and require projects to be ranked in order of importance on national priorities such as flood control and restoration.
- Levees.org galvanized around the Domenici-Landrieu Gulf of Mexico Energy Security Act, S. 3711, which passed in August 2006, giving Louisiana a fair share of revenues from offshore drilling in the Gulf of Mexico.
- In February 2007, Levees.org began demanding an “8/29 Investigation Act” which would commission the independent review of flood protection failures that led to the devastation of Katrina. While the bill has not passed, the legislation has gained a wide amount of support from advocates and government officials.

- **Post-Sandy**

What blogging and Yahoo Groups did for affected individuals post-Katrina, social media provided for affected individuals post-Sandy. The way Occupy Sandy and the Red Hook Initiative leveraged their Twitter accounts were crucial in getting people (in struggling neighborhoods as well as “outsiders”) to take action in and for specific places in a variety of ways.

<table>
<thead>
<tr>
<th>Table 3.16 Timeline of Organize for Place Examples Post-Sandy</th>
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<tr>
<td>OCCUPY SANDY</td>
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<td>RED HOOK TWITTER</td>
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<tr>
<td>Internal</td>
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<tr>
<td>Internal/External</td>
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1. **Occupy Sandy Social Media**

   Michael Premo, one of the founders of Occupy Sandy, describes the formation of the collective as a form of “social or human networking, not technological networking.” Premo described how personal relationships mediated through information communication technologies created “distributive networks” which then led to localized action on the ground.

   Resources and information flowed through Occupy Sandy via this distributive network comprised of interconnected hubs in neighborhoods. Because Occupy Sandy had a horizontal leadership structure in which no one person was in charge, these hubs formed organically when a member simply assumed a leadership role and set one up in an area with enough needs. Often religious institutions or small business owners donated space to do this. While the hubs coordinated through social media, they also operated independently based on specific needs. People in each hub usually had access to internal organizational documents stored on a Google Drive, but since the social network was so large not everyone knew one another and it was easier to communicate through Twitter (Marie, 2016; Hornbein, 2016).

   Occupy Sandy established three main distribution hubs between November 2012 and January 2013 located at the St. Jacobi Church in Queens, the 520 Clinton Street church in Brooklyn, and the Red Hook Initiative building on Hicks Street in Brooklyn. Members agree that moving their digital interactions to the establishment of these physical spaces marked the real birth of Occupy Sandy. “Activity in the Hubs is what made the collective real. It is what incited action,” said member Drew Hornbein.

   At these locations, Occupy Sandy stored resources, conducted volunteer trainings, and coordinated regional operations (*The Resilient Social Network*, 2013). Occupy Sandy members set up main recovery hubs in the Rockaways, the Lower Eastside of Manhattan, Staten Island, Coney Island, and Red Hook. These were spaces in which individuals could obtain resources, food, assistance, and medicine. Additionally, members set up smaller recovery hubs in the Rockaways, Canarsie, Sheepshead Bay, Bay Ridge, Gerritsen Beach, Long Island, and across New Jersey (*The Resilient Social Network*, 2013).
How did the Internet help members organize and galvanize across these various locations? Figure 3.8 from the Resilient Social Network (p. 55) demonstrates how the information travelled across sites and platforms to Occupy Sandy members, affected individuals, and the general public.

There internal networking tools via Google helped members prepare for external messaging via social media and the online donation systems.

2. Red Hook Twitter

Three days after Sandy hit New York City, Red Hook Initiative staff member, Frances Medina was finally able to go back down to Red Hook from her home in the Bronx. By this time, her RHI Internet personality was so big that she was getting offers from Domino’s Pizza in Ann Arbor, Michigan (since she went to the University of Michigan) to feed the entire neighborhood one day. National news networks like NBC wrote to the Twitter account offering to send their food trucks to RHI for unlimited use. Medina could not manage the communication, offers, and requests alone and claimed she even broke down at one point from all the constant digital activity.

RHI’s Executive Director recruited team members to assist Medina with her efforts. “The Executive Director found me this guy who knew how to do surveys on Google Docs, and I didn’t know about the forms yet. He showed me that I could just gather information from people, and send them a link. We started using Google Forms to get volunteers to sign up to different locations, because there was stuff that was happening with public housing, there was stuff happening with homeowners, and stuff happening with business owners.” Medina and her communications team were coordinating hundreds of anonymous volunteers (many of who came through Occupy Sandy) and several local organizations including the Red Hook Justice Center, the Miccio Community Center, Good Shepherd Services, among others.

A week after Sandy hit, Medina put a system in place. Every day at midnight, she would draft a list of assignments and email them to list-serves and tweet the tasks too. Tony Schloss, the Director of Technology at RHI would also share this list of assignments on the RHI WIFI Twitter splash page. Amazingly, each day, somehow, all of these tasks were completed by anonymous volunteers. Medina could ask for anything online and she would receive it.
While Medina had experience digital organizing for a lot of student organizations in college, she never used social media tools in this capacity. Medina stated, “People did not organize on social media prior to Hurricane Sandy like this. It was not a thing. That's why there was so much research done about how it all works.” Members of RHI and other community organizations around Red Hook referred to the Twitter account as “lifeblood.” In the absence of city, state, and federal preventative measures before the storm and then timely aid in the aftermath of the disaster, Medina’s tweeting filled in several holes.

Medina described her post-Sandy social media strategy as one of the biggest accomplishments of her life. She proudly listed tangible outcomes from here tweeting:

- Developed a strong digital and thus in-person relationship with the local police precinct. RHI could easily get a permit to host events or food trucks whenever they needed.
- Found two Board members for the non-profit organization including the Executive Director of the New York Foundation and an employee of Aetna, both of whom donated thousands of dollars, other resources, and countless hours of time to RHI post-Sandy after seeing Medina’s tweets.
- Connected RHI youth to several jobs and internships through followers and supporters she found on social media.
- Transformed the million-dollar organization into a three million-dollar organization from digital fundraising.

Incite: Conclusion

All of these examples build on the theory of collective efficacy. In order for ICTs to assist groups of people to take action, trust and personal relationships are needed first. While collective efficacy usually refers to personal relationships inside a neighborhood, these examples show how the processes of mediated communication and media production eventually lead to collective efficacy for those who may not be in the same geography, supporting the arguments of Hampton (2013), Shirky (2009), and Haythornwaite (2005) presented in chapter 1. As blogger Everson reflected, “It was especially powerful to see that this digital community had the power to act together collectively.”
Crowd-Sourced Deliberation: Include

Crowd-sourced deliberation differs from “Organize in Place” because it is characterized by conversation only. It refers to activities that aim to include as many people as possible in a discussion about what should be done. Crowdsourcing is the process of harnessing collective intelligence from many individuals at once, but those contributing are not necessarily organizing or acting to achieve said goals.

It can be argued that Crowd-Sourced Deliberation is a prerequisite for “Organize in Place.” Several people discuss what should be done through mediated processes before actually doing it. However, it is the fourth category in the typology because the explicit goal or need to “deliberate” was recognized after people reflected on an “Organize in Place” process. For example, when Everson started the MCNO Yahoo Group, his motivation was not simply deliberation, it was to create a space to plan actions in a specific place.

As such, the City of New Orleans hired AmericaSpeaks to design a “mediated” town hall and planning process to help create the Unified New Orleans Plan (UNOP) since so many former residents were dispersed throughout the United States. The Plan was intended as a form of place-based action, and the main goal of the “mediated” town hall was to include as many New Orleanians in the process as possible. AmericaSpeaks set up in-person and deliberative processes known as Community Congress 1, 2, and 3 using Web 2.0 technologies in which individuals could participate through the Internet. The event cost $2.4 million and occurred simultaneously in New Orleans, Houston, Dallas, Atlanta, and Baton Rouge. Letters were sent to 120,000 displaced residents. The events promised transportation, breakfast, lunch, childcare, and translation services (Olshansky and Johnson, 2010).

Neighborland is a digital platform was founded by artist Candy Chang and technologists Dan Parham and Lee Parham to help residents and organizations collaborate on the future planning of their communities. It was started after Chang attended a number of community meetings in the Marigny and Bywater about post-Katrina blight and saw that the “voice” of the community ended up being the handful of people who were loudest in the room. She wanted these meetings to be more inclusive. The online app allows residents to submit their hopes for a place, share knowledge and resources, inform one another about meetings, follow updates, and more. After a successful run in New Orleans, the tool was funded by venture capitalists in Silicon Valley and is now available for purchase and consultation all over the U.S. Lastly, Auciello’s Jersey Shore Facebook Page began through the process of crowdsourcing news content from residents. As the Page grew in popularity, it became a discussion forum too.
Table 3.13 Crowd-Sourced Deliberation Examples

<table>
<thead>
<tr>
<th>POST-KATRINA</th>
<th>POST-SANDY</th>
</tr>
</thead>
<tbody>
<tr>
<td>America Speaks Mediated Town Halls</td>
<td>Jersey Shore Hurricane News Facebook Page</td>
</tr>
<tr>
<td>Neighborland</td>
<td></td>
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</tbody>
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**Post-Katrina**

Table 3.14 Timeline of Crowd-Sourced Deliberation Examples Post-Katrina

<table>
<thead>
<tr>
<th>Internal</th>
<th>Internal/External</th>
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These two post-Katrina examples of crowd-sourced deliberation can easily stray from the principles of community or civic media. When local governments introduce mediated civic engagement efforts to engage with residents and stakeholders in the post-disaster city, they may be doing so simply to appease them (Bratt and Reardon, 2013; Austin, 1972; Fung, 2004; Arnstein, 1969). In this way, the community or civic media becomes a paradox and serves as a platform for local governments to coordinate participation by providing residents with limited voice and influence on city decision-making. However, when non-state, non-corporate actors coordinate such media efforts, they usually do so as part of a larger advocacy or social movement program in transmedia organizing processes (Costanza-Chock, 2014). Therefore, they provide residents with space to exercise their full voice and connect with one another, but may or may not have the needed strategies in place to transform this voice into influence in the post-disaster city. Also, non-profits or other formal/informal organizations may ignore specific perspectives if they are not aligned with organizational goals and values. Community media programs may also become corporate endeavors, as seen through the example of Neighborland.
1. America Speaks Mediated Town Halls

Mayor Ray Nagin charged the Bring New Orleans Back Commission and The Urban Land Institute with formulating a plan to rebuild the city. After they released a report in November 2005 with the infamous Green Dot Diagram, which included green dots on areas that should be rebuilt as parks, the public (particularly African Americans) were outraged. The proposal recommended banning development in parts of New Orleans East and Gentilly, the northern part of Lakeview, and parts of the Lower 9th Ward, Mid-City, and Hollygrove. Except for Lakeview, these areas were majority minority areas (Olshanksy and Johnson, 2010).

Opponents rejected the notion that some neighborhoods were favored over others for rebuilding and government resources. For example, Mtangulizi Saniya of the African American Leadership Project alleged that then Mayor Ray Nagin was only interested in neighborhoods with economic interests and said the plan was “Katrina cleansing – the removal of Blacks from the city” (Olshanksy and Johnson, 2010, p. 56). To avoid even more public distrust, the Mayor ended the assignment.

Because the Louisiana Recovery Authority (LRA) was the ultimate party responsible for managing federal funding, the agency collaborated with local political actors to advocate for the Unified New Orleans Plan (UNOP) that would represent a diverse set of voices from the city and emerge out of deep civic engagement. UNOP would include thirteen planning district plans as well as an overall city plan. Various local and national foundations including the Greater New Orleans Foundation and the Rockefeller Foundation contributed funds to the UNOP planning process because federal and local organizers promised meaningful public participation. The LRA hired AmericaSpeaks, a non-partisan non-profit organization to facilitate the city-wide public participation process.

The UNOP public participation process was developed in a media-saturated environment due to intense publicity, marketing, and engagement (Wagner, 2015). There were two main media and technology innovations implemented to increase participation and therefore establish democratic legitimacy. These included: 1) online voting to pick planning consultant firms for each planning district and 2) a large-scale deliberation about the plan using webcasts across several cities and electronic voting of various design and policy possibilities.

There were three Community Congresses, and AmericaSpeaks led the second two because that is when their official contract began. The first one was led by the New Orleans Community Support Foundation (NOCSF) and took place on October 28th, 2006. It was the low point of UNOP...
(Olshansky and Johnson, 2010). Only 250-300 people attended (the goal was 1,000), and nearly half were UNOP staff, volunteers, observers or students from universities outside of New Orleans. The actual participants were white, wealthy, and from mildly flooded neighborhoods (Olshanksy and Johnson, 2010).

The second Community Congress took place on December 2nd, 2006. In addition to an event in New Orleans, the team organized simultaneous meetings in Houston, Dallas, Atlanta, and Baton Rouge, and sent letters to 120,000 displaced New Orleanians. AmericaSpeaks worked with over 50 grassroots organizations and the meeting was broadcast live on the Internet in designated libraries across sixteen other American cities. Transportation, breakfast, lunch, child care, and translation services for Vietnamese and Spanish speakers was all provided. Nearly 4,000 people across the country and in New Orleans registered for the event.

Video conferencing allowed participants in other cities to join in discussions, provide comments, and ask questions. Internet and keypad voting devices were used to obtain direct responses for specific questions. A total of 2,366 keypads were used during the congress of which 772 were used in New Orleans. Thus, two-thirds of the participants were displaced residents. Additionally, 63% of the participants were African-Americans and nearly half had pre-Katrina household incomes less than $40,000. Also, every planning district was well-represented (Olshanksy and Johnson, 2010; Wagner 2015).

Image 3.6 AmericaSpeaks Key Pads for Voting (Left) & Remote Participant Video Conference (Right)

Source: http://communitygumbo.blogspot.com/2006/12/ (Rising Ride NOLA Blogger)

Six weeks after this second community congress, AmericaSpeaks set up the third and final one on January 20th, 2007. Approximately 1,300 people attended the event or watched in New Orleans, Atlanta, Dallas, and Houston. Displaced residents interested in participating and living in Baton Rouge were bussed for free to the event in New Orleans. Planners summarized key elements of the plan and AmericaSpeaks representatives led discussions in small groups and continued keypad polling (Olshanksy and Johnson, 2010). In the end, the 510-page UNOP document, titled Citywide Strategic Recovery and Rebuilding Plan was accepted and approved by the New Orleans city planning commission, the city council and mayor, and the LRA. “...the citywide plan turned out to be a rather
modest-looking document, considering the political drama and the millions of dollars that went into to producing it. In contrast, the district plans were dynamic, colorful, and full of maps, diagrams, and exciting planning ideas. This was probably as it should be. The district plans are the direct products of active citizen involvement” (Olshanksy and Johnson, 2010, p. 188).

While many academics and practitioners laud AmericaSpeaks’ Community Congress II as a successful case of crowdsourcing and meaningful deliberation via technology, others including scholar Jacob Wagner criticize how media was used and created during the process. He asserts, “While on the surface the UNOP plan appears to be the result of a process enhanced by the latest use of digital technology, underlying aspects of the UNOP process, including its governing structure...suggest a need to analyze how the use of digital media impacts planning processes, the content of plans, and outcomes” (Wagner, 2015, p. 108). He argues that online voting simplified planning problems to a set of basic choices that removed the complexity of the issues at hand.

Additionally, at Community Congress II, there was a group of planners known as the “theme team” who summarized the thousands of comments provided to them through the Internet and other networks (facilitators sent comments from table discussions too). The theme team processed and edited these comments, which were then presented back to all participants. Wagner reflects, “...[the] editing of citizen comments raises significant questions about the digital mediation of planning information and highlights the more fundamental issues for planning theory and ethics of how digital media are employed and to what ends” (Wagner, 2015, p. 122).

2. Neighborland

Neighborland is a software that allows civic leaders to collaborate and deliberate with residents around place-based questions. The tool stemmed from urban planner and public artist Candy Chang’s “I Wish This Was” installation in the Marigny and Bywater neighborhoods of New Orleans. In 2010, Chang posted thousands of “I wish this was _____” stickers on vacant buildings inviting people to share their thoughts. “There was a large influx of new residents to New Orleans, and a lot of public discourse about the future of the city,” recalls Daniel Parham (2016), the current CEO of Neighborland.
As a resident in this area, Chang attended several different local public meetings about dealing with post-Katrina blight. She explained (2017):

I had a hard time initiating conversations and speaking up at community meetings. The interactive experiments were a way for me to ask my neighbors things that I was too shy to ask in person. They were a way for the quieter people like me to share just as much as the loud ones. Over time I realized they had other benefits. They’re accessible to everyone in a community. They’re public forums where many people can easily get involved on their own time. They’re anonymous so people can open up in ways that might not have otherwise.

Chang saw anyone who lived or worked in the area as the constituents of her project. Her aim was to create a tool for individuals to voice their hopes and concerns, and watched how those stickers actually led to change (Organize for Place) from the installation of bike signs to the planting of trees (Chang, 2017). She did not exactly track how the statements on the stickers led to change, but somehow the assertion of an idea in this way created momentum for small-scale action from residents.

However, she soon realized that there were needs and desires on those stickers that required more resources, and her public art installation project needed to be expanded to include the power of local officials and non-profit organizations that had these resources (Chang, 2017; Parham, 2015). Chang collaborated with software engineers and entrepreneurs (who also happened to be her good friends), Dan Parham and Tee Parham to co-found and launch the digital communication platform, Neighborland on July 4th, 2011 (advertisement pictured to
the left). With this new web-based platform, local governments, non-profit organizations, or other clients can easily crowdsourc input and feedback on various projects throughout the city. Deliberation occurs through a comments feature and a “me too” button.

In its first year, Neighborland was focused on New Orleans projects only and was funded through Change by Us (a grant from ArtPlace), four Tulane Urban Innovation Fellowships, and the Rockefeller Foundation. In November 2011, Neighborland partnered with non-profit organization dedicated to revitalization and economic development, St. Claude Main Street, to collect ideas for property owners aiming to recruit new businesses to the corridor. In December 2011, the company set up an interactive installation on The Saratoga building for architecture and development firm, Wiznia. Because the building is located at a bus stop, the position was ideal to capture feedback from a variety of residents about potential ground floor retail possibilities via text messages. Soon after, Neighborland helped the New Orleans Food Truck coalition facilitate an online discussion about the city’s outdated and overly-restrictive food truck laws, as well as collect 1,000 signatures to change the policy (Neighborland: A Year in Ideas).

In April 2012, the Obvious Corporation (a startup incubator and investment fund led by Twitter co-founders Evan Williams and Biz Stone) led a Series Seed financing\(^\text{57}\) of Neighborland to support further development of the platform and rollout the product nationally. At this point, Daniel Parham moved to San Francisco to connect with venture capitalists. By 2017, Neighborland had worked with hundreds of city agencies, universities, foundations, and local non-profits across the United States. As a company, Neighborland licenses their web-based platform to these civic organizations. When I asked Candy Chang and Daniel Parham how they evaluate success, they explained that it all depends on the project. Their clients define the success, which may be building social connections, brainstorming, hosting and event or advocacy (Chang, 2017; Parham, 2016). There is no expectation of actual change as the app’s purpose is just to help people voice the need for change.

Post-Sandy

I was not able to uncover many crowdsourced deliberation initiatives post-Sandy, except for Auciello’s JSHN Facebook Page, which I profiled in Bottom-Up Journalism. Unlike the AmericaSpeaks mediated town halls and Neighborland, JSHN has not been explicitly hired by an outside entity to facilitate crowdsourced deliberation. Rather, crowd-sourced deliberation is inherent in the model of how Auciello posts content to the page. He requests information from his followers and verifies it before posting. Followers then organically deliberate about the material.

\(^{57}\) A Series Seed Financing is the first financing that a startup goes through.
1. Jersey Shore Hurricane News Facebook Page

On April 12, 2016, Jersey Shore Hurricane News posted: “With thousands of residents still not back in their homes as the fourth anniversary of the storm approaches in October, the delays encountered by homeowners seeking assistance to rebuild has been a recurring complaint at various legislative hearings.” The post then links to an article that states over $1 billion has yet to reach Sandy victims. The post was shared 43 times with a conversation among 42 different followers sharing their opinions and experiences with recovery funds.

In 2014, JSHN partnered with Rutgers University researchers on a coastal storm risk communications project. Each week, Auciello would post questions from the research team such as:

- Please respond to this only if you evacuated during Hurricane Sandy. Did you hear something in particular that significantly influenced your decision to evacuate? Who said it and what did they say?
- Please respond to this only if you were asked by officials to evacuate during Hurricane Sandy, and you DID NOT evacuate. Why did you choose not to evacuate?

### Table 3.15 Timeline of Crowd-Sourced Deliberation Examples Post-Sandy

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<td>JERSEY SHORE HURRICANE NEWS</td>
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| Internal | | | | | | | | | | | | |
| Internal/External | | | | | | | | | | | | |
Figure 3.9 provides a snapshot of answers to the first question. “Bringing together many voices about a topic in one place is one of JSHN’s biggest accomplishments,” stated Auciello. The JSHN Facebook page provides a platform for conversation among Monmouth and Ocean County residents.

Figure 3.9 Snapshot of JSHN Facebook Comments

Include: Conclusion

The intention of the examples in this category were to create spaces for inclusive conversation, which may or may not lead to action or change. While Jersey Shore Hurricane News is a true community media endeavor, the AmericaSpeaks mediated townhalls and Neighborland (the app) are examples of civic media. They use ICTs in a participatory way for the “greater good” (Gordon and Mihailidis, 2015), but are not necessarily grassroots endeavors. I still chose to include them in the typology because initiators believed their projects were countering mainstream narratives by offering an alternative for another type of discourse. As discussed in chapter 1, because the definition of civic media is so broad, it is difficult to know how to assess its success, which is true for the AmericaSpeaks mediated townhalls and Neighborland, both of which definitely increased inclusivity, but to what end? While AmericaSpeaks provided translators, transportation, and childcare enhancing inclusivity, and Neighborland’s digital platform captures more respondents, what happens to the conversation comments? How do those who contributed feel about their endeavors?
Therapeutic Networking: Interact

While information sharing, conversation, and organizing may all occur within activities that embody this category, surviving a natural disaster can be a psychologically traumatic and isolating experience for an individual, especially if displaced from one’s home. Sociologists Herbert Gans and psychologist Marc Fried documented the trauma of losing one’s home and neighborhood in the late 1950’s and 1960’s when the West End, and immigrant neighborhood was destroyed due to urban renewal. Gans studied the Italian community in the West End, and found that the physical environment of the neighborhood supported the residents’ lifestyles and fostered their tight-knit social ties, which was abruptly and violently taken away from these inhabitants.

The same is true for displaced residents post-Katrina and post Sandy. Trauma refers to a potentially harmful, life-changing event that triggers various coping mechanisms that may be experienced both individually and collectively (Ostertag and Ortiz, 2013; Figley, 2009; Taylor, 2003). Individual trauma caused by an emotional or physical shock creates lasting damage to the psychological development of a person and collective trauma is understood as “a blow to the tissues of social life that damages the bonds attaching people together and impairs the prevailing sense of communality” (Erikson, 1976, p. 153). When individuals interact with one another share their trauma, it becomes collective trauma (Ostertag and Ortiz, 2013).

Several people after both Hurricane Katrina and Hurricane Sandy used digital tools to interact with others and share their experiences as a form of therapy to cope with trauma. Journalist Cynthia Joyce (2015, p. 19), and editor of the book, Please Forward: How Blogging Reconnected New Orleans After Katrina writes, “For those fortunate enough to have regular access to a computer, blogs functioned as a public forum for mourning.” When an individual experiences trauma or a group suffers collective trauma, digital networks and the support they provide can serve as therapeutic antidotes (Ostertag and Ortiz, 2013).

Mondo Bizarro, a digital storytelling project originated shortly after Hurricane Katrina. For three years, the producers traveled throughout Louisiana and the surrounding areas to record stories from a diverse cross-section of the public. Participants included displaced residents in shelters, relief workers, community organizers, neighborhood leaders, artists, medical staff, city planners and government officials, among others. Nick Slie, one of the founders of Mondo Bizarro stated, “The act of sharing one’s stories was therapeutic and it helped people connect with and find others who had similar stories, which gave participants hope as they tried to rebuild their lives.” Sandy Storyline, the digital storytelling project discussed previously in Bottom Up Journalism, provided a similar therapy for participants. The Rockaway Waterfront Alliance Intergenerational Tech Program addressed the trauma senior citizens felt by connecting older residents with youth to provide company while teaching everyday technology.
Table 3.16 Therapeutic Networking Examples

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<thead>
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<th>POST-KATRINA</th>
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<td>Blogs (Rising Tide)</td>
<td>Sandy Storyline</td>
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<td>Mondo Bizarro</td>
<td>Rockaway Waterfront Alliance</td>
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<td>Intergenerational Tech Program</td>
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**Post-Katrina**

In both of these examples, ICTs were used to share stories, and this process was therapeutic for the individual. While the “therapeutic networking” portion of the story-sharing occurred by connecting with other New Orleanians, these narratives ended up having larger, external audiences beyond the city too.

Table 3.17 Timeline of Therapeutic Networking Examples Post-Katrina

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<th>Internal/External</th>
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1. **Blogs (Rising Tide)**

Scholars Ostertag and Ortiz demonstrate through their various studies (2013, 2014, 2015) that many residents of New Orleans who became bloggers were frustrated at the way their city was being represented to the nation through mainstream national news. Connecting with like-minded New Orleanians enabled individual frustrations to turn into collectively experienced anger, and the act of blogging to correct these mainstream narratives was cathartic (Everson, 2016; Gadbois, 2016; Ostertag and Ortiz, 2013 Macias et al, 2009; Procopio and Procopio, 2007). Ostertag and Ortiz quote blogger *Ray in Exile* (2013, p. 212):

> All of these writers had things in common. A frantic need to know what was really happening to the city and its people. A passionate desire to make sure the world understood the scale of the tragedy, the impact on those who suffered, and the future implications for the rest of the country; why New Orleans mattered, and what was being lost. A furious rage as insults piled upon injuries. And deep down, an indescribable pain, a wide-eyed teeth-grinding emotional trauma. A scream out of every nerve ending. A psychic howl of pain and exhaustion and abandonment.
Everson and Gadbois both discussed how blogging made them feel less alone after Katrina, and how the digital community was a “source of strength” during confusing and chaotic times (Gadbois, 2016). The Rising Tide conference that emerged from the bloggers also provided an opportunity for participants to vent their frustrations and in the process, heal individually and collectively. It provided the in-person forum and space to capture and mobilize the feelings that bloggers had been expressing largely online. (Ostertag and Ortiz, 2013, p. 214). In their study of the role of the Internet during Hurricane Katrina (n=1192), Procopio and Procopio (2007) found that emotional support was one of the major functions of digital communities, especially among women.

2. Mondo-Bizarro

Mondo Bizarro is a performance troupe that was founded in 2002 before Hurricane Katrina. The ensemble of actors, musicians, writers, and visual artists “create, present, and produce a wide array of imaginative projects aimed at utilizing art as a tool for understanding what makes people commonly human and individually unique” (Slie, 2016). “We are always trying to figure out how the world lives in fiction and how fiction lives in the world,” explained actor and founding member, Nick Slie.

After Katrina, the trajectory of Mondo Bizarro completely changed. Slie and his Mondo Bizarro colleagues, Bruce France and Bo Harrison, made fake press passes to get back into the city before it was legal. They went straight to their house on Third Street in the Irish Channel, which miraculously still had power. They felt it was urgent to be in communication with the outside world. Somehow, the three men were able to access a wireless router and set up an ad-hoc office in their living room. “It was my first exposure to wireless Internet,” recalled Slie. The living room was open to all people and organizations as they either passed through the city to provide help or were returning to rebuild their lived.

Slie, France, and Harrison, similar to many other New Orleanians were horrified by the way national news outlets and mainstream media were portraying the aftermath of Katrina. “We were already scarred enough by the storm, and those sensationalized narratives were just more painful.” It was this experience of consuming sensational narratives that re-focused the vision of Mondo Bizarro post-Katrina from performance to listening.

“People had a real need to talk as a way to heal themselves,” said Slie. As various individuals and groups came through their Third Street living room, they would always talk about the trauma they experienced through Katrina. Slie shared portions of these conversation with his friend in Berkeley, California and a member of the Center for Digital Storytelling. This friend insisted that the Mondo Bizarro team members record these living room conversations and thus mailed the team a digital voice recorder. Upon receiving this equipment, Slie immediately began recording these exchanges. Eventually these informal talks turned into more formal interviews. Mondo Bizarro interviewed everyone and anyone who came their way from the last resident at Charity Hospital to anarchist volunteers. Eventually, about six months after Katrina, the team built a website and worked
After Mondo Bizarro launched the site, it got 7,000 hits within the first day. Hundreds of people affected by Katrina inside and outside New Orleans started e-mailing the team, asking for their stories to be recorded too. “We were just inundated with e-mails and the demographics of participants were all over the place,” remembered Slie. Those they interviewed and those who requested interviews were about half white and half black, and ranged in ages from 13 to 80. While some of the stories were explicitly about a racialized experience, the Mondo Bizarro team never felt that being white men deterred people from opening up to them (Slie, 2016).

According to Slie, the act of listening for the interviewer as well as the act of being heard for the interviewee was therapeutic. He explained: “We were forming deep connections with one another and releasing anger, fear, and unresolved frustration, and making sense of things. The act of recording actually does this; it archives and solidifies a person’s thoughts. You can listen over and over again.” In this way, the digital aspect of the interviews was an essential part of the “therapeutic networking” because it solidified identity. Slie did not have evidence of whether people were connecting over their stories through the website, but the act of sharing one’s experience and recording it for others to listen to felt like a form “rebuilding one’s self” (Slie, 2016).

The Mondo Bizarro team tried to connect with oral history experts at the University of New Orleans, Xavier University of Louisiana, and Tulane, but saw that they were not taken seriously. “These oral historians had a very particular and rigorous method in the way they collected stories and felt we were not trained to capture meaningful narratives. We were seen as amateurs. So we then saw ourselves more as a form of creative therapy rather than an oral history project,” stated Slie. Mondo Bizarro titled their project the “I-10 Witness Project” because I-10 is the highway into New Orleans. The I-10 corridor goes from Los Angeles, California to Tallahassee, Florida and New Orleanians were scattered throughout that highway after Katrina. The whole project was mostly self-funded. Mondo Bizarro got two private donations – one of $5,000 and another one of $1,000, and completed 300 interviews overall, which are available at i10witnessproject.com.
Post-Sandy

Sandy Storyline has many similar elements to Mondo Bizarro’s I-10 Witness project. The founders also see the act of telling and recording one’s story as a form of rebuilding. However, the Rockaway Waterfront Alliance in Intergenerational Tech Program uses ICTs in a very different way to foster “therapeutic networking” by connecting younger and older residents via the shared goal of learning how to use technology to better prepare for disasters.

Table 3.18 Timeline of Therapeutic Networking Examples Post-Sandy

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1. **Sandy Storyline**

The stories collected via Sandy Storyline are cathartic for tellers, and sharing them also “builds community by getting us out of the closeted spaces of our own heads,” said Premo one of the co-founders of the project (Spayde, 2013, p. 32). There is a tremendous eagerness from artists (visual artists, actors, musicians, photographers, and other creatives) to provide therapeutic services after a disaster (Spayde, 2013). This was demonstrated not only after Hurricane Sandy, but also 9/11 and the 2011 earthquake in Japan (Spayde, 2013). While traditional first responders are at work, other relief efforts using the Internet are launched by artists, such as Sandy Storyline (Spayde, 2013). These sorts of projects provide an emotional support that is not always valued by funders. Falcone, the other co-founder of Sandy Storyline said, “A lot of the funding after a disaster goes right to the physical infrastructure, which is important, but there’s no understanding of the role of our own culture, human interaction, and storytelling in helping the community rebuild” (Personal Interview with Michael Premo and Rachel Falcone, 2013).

2. **Rockaway Waterfront Alliance Intergenerational Tech Program**

Jeanne DuPont is the executive director of the Rockaway Waterfront Alliance, a community-based organization dedicated to empowering residents of underserved neighborhoods in the Rockaways by fostering a greater understanding and connection between residents and the waterfront. The Rockaways are one the most disconnected parts of New York City in the borough of Queens.
The organization mostly focuses on environmental issues and galvanizes people, particularly youth of color, around issues related to climate change. During her eleven years as executive director, DuPont and her staff have observed that while most of the youth participants in their programming are lower income, the one aspect they all have in common is that they are tech savvy. For this reason, DuPont is always thinking of ways technology can foster meaningful connections across the community. As of 2016, she was working on starting a neighborhood Wifi network similar to Red Hook Wifi.

After Hurricane Sandy hit, the Rockaways had no power for three to four weeks and there was no subway service for three months. It was extremely difficult to get in and out of the area, and as reiterated throughout the chapter, there was a dire need for information because no one seemed to know what was happening. The City had to send trailers with showers and electrical outlets inside of them for people to use. Young people instantly began sharing and obtaining information through Facebook once they were able to charge their phones. Meanwhile, elders in the area felt alone and lost (Personal Interview with Jeanne DuPont, 2017).

Accordingly, DuPont initiated the First Wave Intergenerational Tech Program in which youth in the Waterfront Alliance who are up to date on technology teach older adults and immigrants how to use Notify NYC (an alert system), social media, the Internet, and cell phone technology. The purpose of the program was to help the older adults and immigrants be prepared in times of need. But even more importantly, the program was also designed to provide emotional support and human connection to a population suffering from loneliness, which was exasperated after disaster (DuPont, 2017).
Rockaway youth administered surveys in 2013 after Sandy to understand how people were using technology post-disaster and recruited elders to be part of the First Wave program through their surveying. “Because immigrant youth in the area can speak foreign languages such as Tagalog, Russian, Polish, among others, they could easily communicate with and build trust with older residents who felt isolated. The shared goal of learning technology provided a therapy helpful for both parties post-disaster.”

**Interact: Conclusion**

This category highlights one of the most important, underrated uses of information communication technologies post-disaster, a tool to process trauma individually and then collectively. This can be done either by connecting with some through an ICT, by capturing one’s voice through an ICT, or by learning how to use ICTs together. These projects actually negate Turkle’s (2011; 2015) arguments discussed in chapter 1 about being “alone together,” and show how media production via technology is actually an essential part of the group bonding needed for individual and collective resilience post-disaster.
Memorialization: Interpret

Disaster recovery requires more than re-attaining material losses or rebuilding infrastructure, but also entails incorporating the deeply disruptive experience into individual and collective memory (Moulton, 2015). As demonstrated in the previous category, many survivors require human connection to heal. This is because one’s own struggle to form a new personal identity post-disaster is mirrored in one’s social sphere or community seeking similar transformation. These two efforts intertwined create the social memory of a disaster (Vale and Campanella, 2005). “The results...can contribute to the emotional recovery of the community by providing the means to integrate individual, traumatic memories in a narrative framework, which connects elements of their pre-disaster life and identity with their post-disaster experience,” states scholar Sunday Moulton (2015, p. 319). This category includes projects intended to memorialize the disaster and archive a history of what happened by interpreting facts and information through numerous perspectives. Many of the community-based media initiatives previously discussed are unintentionally examples of memorialization because the act of documentation whether it is recording, photographing, writing, etc. creates and solidifies a memory.

For example, the former Biloxi Sun-Herald reporter Josh Norman wrote in his personal co-authored blog, Dancing with Katrina: “There is plenty of garbage on the roads for strays to eat and therefore I find myself not caring all that deeply about how the animals were affected. Maybe in a few months I’ll be worried about how Flipper and Lassie fared, but now, I’m more worried about what my neighbor on a Section 8 housing allowance and welfare is going to do...” Norman and Keller shared the Sun-Herald’s Pulitzer Prize for Katrina reporting, but sentiments like the one above would never make it into the ‘official’ news story” (Joyce, p. 19, 2015). In this way, informal post-Katrina blogs memorialized individual emotions, thoughts, and experiences. Cynthia Joyce’s book, Please Forward: How Blogging Reconnected New Orleans after Katrina is a collection of post-Katrina blog posts from 2005-2007. She writes in the introduction:

...even though a print collection of online writing might seem to be beside the point, it’s worth resurfacing the digital remnants, words that have otherwise since been forgotten or lost in a shuffle between servers, relegated forever to Page Not Found status. The internet, it turns out, is not forever...it’s as much a testament to lost memories as it is to memories about what we lost (Joyce, 2015, p. 1).

Mondo Bizarro’s I-10 Witness Project inspired I-Witness Central City in 2010 as the historically African-American neighborhood was rapidly changing and gentrifying due to post-Katrina development. “We were recording people’s memories about a specific location. We left a marker at the location where an individual could call in and hear the memory,” explained Nick Slie. The recordings are on the Internet via a digital story map, and the purpose of the project was to preserve
the memories and stories of Central City pre-Katrina and pay tribute to the rich culture of the neighborhood.

Similarly, Sandy Storyline is also a memorialization project. Founder Rachel Falcone described how a year after the storm, policy officials forget the essence of what happened because they got drowned in technical analyses and what or how to implement policies and programs. “Storyline is a curated people’s history of the disaster,” said Falcone.

In New Orleans, the Neighborhood Story Project is a collaborative ethnography and publishing organization in partnership with the University of New Orleans that also produces a curated people’s history. Since 2004, the organization has partnered with public schools, grassroots organizations such as benevolent associations, community museums, Mardi Gras Indians, and other institutions to create books and other printed materials that supports their mission: “Our stories told by us and profited by us.” The founders, Abram Himelstein and Rachel Breunlin, teach participants about creative nonfiction, in-depth interviewing, and a wide range of photographic practices and then lead the authors through the process of editing, publishing marketing, and distribution. The organization released five books before Katrina and were very well known in the city by the time the storm hit (Himelstein, 2016). “Our mission just became more important after the storm when major news outlets were defining the history of the disaster and profiting from devastation,” said Himelstein.

Unlike the other examples throughout the typology and this category, the Neighborhood Story Project books use ICTs minimally because the final product is not archived on the Internet. Audio recorders and cameras help produce the book, but they are not the essence of the creation. Himelstein (2017) explained why:

First off, there's the digital divide. We want everyone to be able to access these memories. A lot of what I think we're doing is installing history and legacy into homes. I think of these as being sculpt books. The way my whole approach to books is that they're like memorialization sculptures and that they're pieces of art that live in homes.

The use of ICTs in such memorialization projects is not politically or economically instrumental, but rather assists participants with archiving their memories through an array of tools. Remembrance is an essential component of resilience (Vale and Campanella, 2005). The process of interpretation of facts and memory-making also leads to identity assertion and even identity creation (Personal Interview with Tapica Sparkman (former resident of Lafitte, 2016). This was true for the “Big Four” oral history projects in which public housing residents from C.J. Peete, B.W. Cooper, Lafitte, and St. Bernard solidified their neighborhood identities by reflecting and sharing the past. The project started because the Housing Authority of New Orleans and HUD announced in early 2006 that they would demolish the city's four major public housing developments. Hurricane Katrina did not destroy these developments, but the city wanted to replace them with mixed-income housing. HUD
mandated that each development create a digital history of its community. These took the form of a participatory documentary, digital oral histories, and photography exhibits.

Launched in 2005, the Katrina Digital Memory Bank uses electronic media to collect, preserve, and present the stories and digital record of Hurricane Katrina and Rita. George Mason University’s Roy Rosenzweig Center for History and New Media and the University of New Orleans, in partnership with the Smithsonian Institution’s National Museum of American History and other partners, organized this project. As stated on the project web page: “…the Hurricane Digital Memory Bank contributes to the ongoing effort by historians and archivists to preserve the record of these storms by collecting first-hand accounts, on-scene images, blog postings, and podcasts. We hope to foster some positive legacies by allowing the people affected by these storms to tell their stories in their own words, which as part of the historical record will remain accessible to a wide audience for generations to come” (http://hurricanearchive.org/about).

The Lower Ninth Ward Living Museum is another digital oral history project co-founded by Dr. Caroline Heldman, a professor at Occidental College and PhD candidate, Ian Breckenridge-Jackson in 2011. Dr. Heldman began a service learning class at Occidental College in which her students would spend time in New Orleans recording these oral histories (Personal Interview with Rebecca Cooper, 2016). Using their own equipment, her students collected approximately 60 oral histories of former residents. Dr. Heldman also recruited key community leaders from the Lower Ninth Ward to serve on the advisory board of her project and help recruit oral history participants. Unlike the Katrina Digital Memory Bank, this project has a physical component – “a living museum” in the Lower Ninth Ward inside a renovated shotgun home that features the oral histories and history exhibits of the Lower Ninth Ward (l9livingmuseum.org), which is free and open to the public and serves as an informal community gathering space.

New Orleans Kid Camera Project was founded in 2008 by two Tulane Master in Social Work students to help low-income young people all over the city (the 6th, 7th, 9th, 12th Wards, New Orleans East, Algiers, St. Bernard Parish, and Gertown) use photography to express their feelings and explore their environments post-Katrina. The project is described as “an unfiltered view of New Orleans through the eyes of its youth.” These images or visual memories live on the Internet.

Independent producers and newcomers to the city post-Katrina, Jacob Brancasi and Heather Booth started Open Sound New Orleans, an interactive audio mapping project in 2009. Brancasi and Booth were amazed by how each New Orleans neighborhood was so distinct in its visual architectural character, but also in its sounds. They asked New Orleanians through e-mail and social media, as well
as through word of mouth, to record what they hear in their neighborhoods and then upload the audio to OpenSoundNewOrleans.com. According to their website, “in order to facilitate a diversity of direct dispatches from around [the] city, we lend recording equipment – and offer training in its use – to community organizations, neighborhood groups and individuals.” Open Sound New Orleans also allowed individuals to share, reuse, and adapt recordings. The idea was to create a New Orleans history of sounds.

Media makers are interpreting the same event in different ways. Oftentimes, these projects bring together individuals with a technical expertise such as film production and those who have local knowledge, to produce media in collaboration. The following sections will detail memorialization projects that take the form of collaborative documentary or use video.

Table 3.19 Memorialization Examples

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<thead>
<tr>
<th>POST-KATRINA</th>
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<tbody>
<tr>
<td>Mondo Bizarro</td>
<td>Sandy Storyline/Land of Opportunity</td>
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<tr>
<td>Big Four Oral History Projects</td>
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<td>Katrina Digital Memory Bank</td>
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<td>Lower Ninth Ward Living Museum</td>
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<td>The Neighborhood Story Project</td>
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Post-Katrina

The two cases outlined below each use video in different ways to memorialize Katrina. Land of Opportunity is a more “professionally produced” history of the storm, whereas the Vayla Vlogs, which were inspired by a traditional documentary, documents lived experience in a more informal way.

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58 I was not able to interview the founders of the Big Four Oral History Projects, the Katrina Digital Memory Bank, the New Orleans Kid Camera Project, or Open Sound New Orleans.
Table 3.11 Timeline of Memorialization Examples Post-Katrina

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1. **Land of Opportunity**

   Land of Opportunity is a transmedia project, which means it uses multiple platforms to tell a story. It began as a traditional documentary and other components are Internet-based, including an interactive, participatory timeline that compares Katrina to Sandy (this aspect of the project will be discussed in the post-Sandy section). Filmmaker Luisa Dantas moved to New Orleans in 2006 to work with the Association of Community Organizations for Reform Now, ACORN.\(^{59}\) As a professionally trained filmmaker, she recorded everything she could attend from public meetings to informal gatherings, and gave other volunteers she met video cameras to do the same. She obtained about 1500 hours of footage. “We were living in a critical moment of history and I was obsessed with capturing it all,” stated Dantas. Several scholars have used her footage as research materials including Robert Olshanksy for his book about the UNOP process, *Clear as Mud* and Karl Seidman for his book about neighborhood planning, *Coming Home to New Orleans: Neighborhood Rebuilding After Katrina*, demonstrating how one person’s footage has the power to shape so many written histories.

   From this plethora of footage, Dantas and her production team of 16 edited a documentary released in 2011 that tells the stories of very different people from, returning to, and newly arrive in New Orleans post-Katrina. The documentary transformed thousands of hours of footage to shed light on: overall planning, public housing redevelopment, displaced residents, and immigrant workers. Main characters in the documentary include high school student Tr’vel Lyons, a young African-American that relocated to Los Angeles; Andres Duany, a developer and planner with ambitious and

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\(^{59}\) The organization was founded in 1970, but dissolved in 2010 due to the mismanagement of public and private funds.
controversial plans for rebuilding New Orleans; Al Aubry, a Gentilly resident with deep roots in the city who began farming on an empty lot to provide food for his family; Vanessa Gueringer, a Lower 9th ward community organizer; Marco and Elza, undocumented Brazilian immigrants who came to New Orleans in search of work; and Sharon and Kawana Jasper, displaced public housing residents who fight to prevent the destruction of their development. Dantas and her team worked alongside these individuals as they edited their stories, but retained the final artistic license. In this way, Dantas believes that documentary production and participatory planning are very similar processes.

If you take a step back from all the authentic community engagement and write the ideas of truly participatory planning and bottom up planning, it’s about which narrative is being privileged and what’s the dominant narrative. Is there enough dialogue between different narratives? I think this is also the core of good storytelling. So I think there’s a lot of overlap around the ability to generate a true story. Who’s hearing it? Who’s not? Who’s attaching value to that narrative? Who’s not? How will the narrative be remembered? (Personal Interview with Luisa Danta, 2016)

In the last line of this quote, Dantas asked, “How will the narrative be remembered?” This is an important purpose of her project – to provide a representative history and memory of the struggles post-Katrina. Additionally, while the documentary is firmly about New Orleans, the film intended to represent larger forces at play in urban redevelopment and community rebuilding in the U.S. “New Orleans was a microcosm of something larger…and the goal of this media was to knowledge-share memories,” stated Dantas. For example, in 2011, they cut together a piece for the Mayor of Detroit, who wanted to learn lessons from New Orleans as he tackled the city’s economic crisis. Dantas remarked, “One impact goal is can we change the conversation to not keep reinventing the wheel or repeating this situation every time a large-scale disaster happens by providing this type of history.”

Aside from the documentary, other aspects of Land of Opportunity include a standing website with curated film clips and footage that activists, educators, researchers and journalists can use accordingly. The interactive timeline compares Katrina with Sandy and allows partner organizations to contribute their own materials to continue create a living history (detailed in the Post-Sandy section).

2. VAYLA Vlogs

The Vietnamese American Young Leadership Association (VAYLA) was founded in 2006 to combat environmental racism in East New Orleans during post-Katrina reconstruction. Through an executive order with no community input, the then Mayor Ray Nagin located a toxic landfill for Katrina debris known as the Chef Menteur C&D Disposal Site less than a mile away from the historically Vietnamese and African-American community, Village de l’Est. “It was as if we did not even exist,” said Hyuong Nguyen, the Media and Outreach Director of VAYLA who has been part of the organization since its founding. “Before Katrina, the elders of the community were the leaders who made all the decisions about the neighborhood, but the toxic landfill incited the younger
generation to speak out too. The elders needed the younger generation to organize against City Hall because of language barriers,” explained Nguyen.

It was through this resistance that VAYLA was formed. After the community successfully organized against the local power structure and was able to get the mayor to relocate the landfill, VAYLA became a multi-issue, multi-racial (primarily Vietnamese) youth organizing group. The young Vietnamese activists learned that if they were not more active in amplifying their stories and narratives, their identities would be forgotten (Personal Interview with Nguyen, 2016). In 2009, filmmaker Leo Chiang produced a documentary about the landfill and worked very closely with the neighborhood’s youth and VAYLA to gain entrée into the community. “I saw myself as an aggregator and archivist of all the community-based media out there about East New Orleans. In the process of collecting this stuff, the young people I worked with and relied on for information and connections became fascinated by how their story was told and how they would be remembered,” stated Chiang.

Chiang discussed the challenges and ethics of condensing and streamlining the story for his documentary. While he embedded himself into the neighborhood, interviewed all the main players, and worked alongside residents to craft the film’s narrative, he still needed to figure out which details to leave out and include. He had an intense and revelatory moment when he showed the film to community members (of all ages) and they would quote it back to him as history. “Whatever narrative I shaped, subjects saw this consciously and subconsciously as the story they wanted to tell,” reflected Chiang. Hyuong Nguyen of VAYLA was inspired by the power of Chiang’s documentary in asserting identity inside and outside East New Orleans. Thus, in 2010, she started creating Vlogs for VAYLA. Vlogs are blogs in which the posts are comprised of videos. The Vlog had three goals: (1) to share information with the youth of New Orleans through a platform that was popular to them, (2) inspire other young people in the area to contribute to the Vlogs or make their own, and (3) document VAYLA youth’s work and lives (Nguyen, 2016).

“Chiang’s documentary made our history real to us and I wanted to keep doing that through the Vlogs. The youth community needed to know what was going in the past, present, and future,” said Nguyen. She noted that her peers and VAYLA youth did not listen to Vyong Ki Son’s radio station like the elders. Her Vlog posts are extremely popular among VAYLA youth, and they tend to spotlight local heroes in the community doing notable work. She produces and releases them on several social media channels including YouTube, Facebook, and Twitter twice a month. Other VAYLA youth collaborate with her to make them, and she teaches approximately ten young people a year how to use media to tell their own stories. Through the Vlogs, Nguyen believes, “We tell our own story more truthfully and it will be remembered that way.”

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60 When Nguyen first started vlogging, she would produce them twice a week.
Nguyen sees her Vlogs as successful for two main reasons. Initially the Vlogs were only produced for people within East New Orleans, but then Nguyen started receiving emails from people around the country also interested in Asian-American youth development about how interesting and inspiring they were. “At conferences, a random person or a funder would tell me that they could not wait for the next Vlog,” said Nguyen. She realized she had a national audience. Second, Nguyen has watched how over the years, vlogging has made young people at VAYLA more critical of mainstream media. “They want to shape the story of their own history. If they see an article on Facebook that is not true, they get angry. They don’t believe the mainstream media as much and now know how to tell their own story,” asserted Nguyen.

**Post-Sandy**

Similar to the Post-Katrina examples, these cases are also primarily video-based. While Sandy Storyline / Land of Opportunity Interactive is an education tool, the other example discusses how films (even ones made through cell phone technology are a form of memorialization).

Table 3.20 *Timeline of Memorialization Examples Post-Sandy*

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1. **Sandy Storyline/Land of Opportunity Interactive**

After Sandy Storyline launched, Dantas collaborated with Premo and Falcone of Sandy Storyline to build Land of Opportunity Interactive between 2012 and 2013, though Dantas is the main producer of Land of Opportunity Interactive. The goal of the platform was to bring a lot of different types of content about various disasters (broadly defined) into one place (Personal Interview with Ada McMahan, 2016). The site is organized by three main concepts: 1) Displacement/Home, 2) Devastation/Rebuilding, 3) Community/Commodity, and 4) Exclusion/Engagement. Katrina and Sandy are the main topics of the timeline in the “Compare” tab, all of which allows the user to access other mini stories in the form of photos, audio recordings, news articles, and data visualizations, which different partners shared with the team. Ada McMahan, Project Manager for Land of Opportunity Interactive, who came to New Orleans after the BP oil spill to work on the aforementioned Bridge the Gulf project, stated, “The idea was to explore common themes across disasters, draw comparisons, and make connections.”
Dantas described her vision for the site:

The basic, most fundamental goal is this idea of these connections that you make, whether it's on the ground, actual physical person to person connections, whether it's conceptual connections, or connecting the dots between what keeps being presented as these disparate processes...

You need to look at these things [disasters] together, and you need to compare and contrast to understand that there are actually some really core structural similarities with these processes, instead of continuously insisting that it's different here, so it needs a different set of solutions.

For example, on the timeline, two videos juxtapose one another. The Sandy video shows two white renters left without heat or electricity, battling cold weather and mold for months in Coney Island. The Katrina video highlights a life-long New Orleanian, also white, who refused to leave his home and pets during Katrina. From there, the user can click his/her way through to the theme of displacement and learn about the work of the anti-eviction mapping project, which documents the dispossession of San Francisco Bay Area residents in the wake of the tech boom, Dudley Street Neighborhood Initiative’s land trust in Boston, or the redevelopment of Cabrini Green in Chicago. Media makers or non-profit organizations that were part of Dantas’ network contributed material. Those involved with the project included Kelly Anderson and Allison Lirish Dean of “My Brooklyn”, Ronit Bezalel of “70 Acres in Chicago”, Oren Goldenberg of “Brewster Douglass, You’re My Brother”, Mark Lipman and Leah Mahan of “Gaining Ground”, and of course Bridge the Gulf and Sandy Storyline (Center for Media and Social Impact).
The original vision was for contributors to see the platform as their own and load content where they see fit, but this proved too technologically challenging. Thus, McMahan served as the liaison between partners and the Land of Opportunity Interactive (Dantas, 2016; McMahan, 2016). In general, Land of Opportunity Interactive had four types of partners: media makers, educators/scholars, advocates, and journalists.

Dantas formed partnerships with the National Housing Institute (NHI), The New Orleans Coalition on Open Governance (NOCOG), and the Right to the City Alliance. Each organization had different goals and roles with the site (Dantas, 2016; Center for Media and Social Impact). NHI has served as an advisor on content and has contributed a variety of curated, multimedia material for the several layers of the site. NHI wanted audiences to consume and understand their research and its implications. NOCOG wanted to inform and engage their constituents about participatory budgeting through the platform, and became a pilot case for how an advocacy group could use Land of Opportunity Interactive to further their social-change goals, in this case by educating their base through an interactive video. The Right to the City Alliance began using the site to incite their constituents around multiple issues, including affordable housing and land-use.

Overall, the interactive site was and is experimental. The founders did not have a specific vision for it beyond using media to memorialize experiences post-disaster and weave a variety of crises together. “The less siloed the people are about disaster recovery, the better. Disasters are going to keep happening and certain patterns repeat themselves. The more people can have a broader view, the better that is…” explained McMahan. Yet nobody really had a good sense about the impact of the platform (McMahan, 2016). “Working with educators made sense to get it into the classroom and there is a curriculum guide, but beyond that, in general there was never any clarity on how to use it,” said McMahan.

As of 2017, Land of Opportunity Interactive had no funding and was initially made possible through foundation grants, particularly opportunities from Ford Foundation’s Metropolitan Opportunity Unit. Dantas lamented, “Typically there is this perception among funders that storytelling is sort of luxurious and somewhat frivolous, and not an actual core tool to achieve goals, and to further the work.” Dantas is continuously brainstorming how to evaluate the success of her project: “You can't expect us to measure success by number of hits and views, if what we're trying to do is something more substantive than that because the other thing to contemplate is the way that people consume media online is extremely superficial, extremely cursory, and is about minimal substantive engagement, like wide swaths of content. That's not really in alignment with the idea of deep social change.” Ultimately, Dantas would like to design a longitudinal study about the impact of such projects on public consciousness.
2. Independent Film Retrospectives

In 2013, Nick Shimkin of the Brooklyn Arts Council organized a one year commemorative event around Hurricane Sandy from October 25th – 29th. Through social media, he put out a call for Sandy-related pieces and collected enough media to amass three nights for a mini film festival memorializing Sandy. “At the time of Sandy, it seemed like almost everyone had a video camera through their phone, so professional filmmaker or not, you could document history,” said Shimkin. Many of the pieces showcased were informal perspectives shot through an iPhone, which is atypical for film festivals (Personal Interview with Shimkin, 2017). “We were memorializing the storm through people’s ad-hoc footage,” stated Shimkin. The first night of his commemorative event included “a collection of narrative and documentary shorts, both irreverent and commemorative” about the storm and experiencing it (Shimkin, 2017). The second night featured experimental and ethnographic films about waterways, seascapes, and New Yorkers’ relationship with its waterfronts. The last night, which took place on Sandy’s actual one-year anniversary, introduced documentaries “capturing the storm’s impact, aftermath, and communities’ response to devastation” (Shimkin, 2017).

Similarly, Occupy Sandy activist and independent filmmaker Sofia Gallisa Muriente organized the commemorative event Sandy Witness with The New York Film Video Coalition and the Downtown Community Television Center (DCTV). The event was about cell phone media that captured the storm (Personal Interview with Sofia Muriente, 2016). Muriente went to the Rockaways two days after the storm to help her friend whose home had been destroyed. Through her Occupy Wall Street networks, she knew where to go for help and information and became a local leader in emergency response at the You Are Not Alone (YANA) Community Center. As she volunteered, she also captured everything she was doing and seeing with her cell phone (Muriente, 2016). “I was watching disaster history unfold,” she said. This was common among many people who experienced the storm (Gallisa, 2016; Messinger, 2016). Dara Messinger, the Director of Public Programs, stated:

How you were able to capture information from your cell phone, it changed the entire information sharing landscape. Bigger media groups were not on the ground in the same way people who were experiencing the storm were. People thought, “I am not waiting for anyone to make the story. I am not trying to sell to HBO. I am just going to make it, and let it seep into public consciousness.”

Muriente collected cell phone footage from a variety of people of different ages, socioeconomic backgrounds, genders throughout New Jersey and New York City, and stitched together a larger media piece, which she also titled Sandy Witness for presentation at the commemorative event. The footage portrays the personal and emotional response of the videographers in reaction to severe wind destroying their neighborhoods, knocking down trees, electrical fires, and flooding. “It’s a type of memorialization that can be missed with more ‘official’ media,” said Messinger.

Conclusion: Interpret

These projects all consider what gets selected for remembrance, and emphasize that the same event can be interpreted in very different ways. In their book, The Resilient City, Vale and
Campanella (2005) present cultural historian Edward Linenthal’s three modes of remembrance narratives: the progressive narrative, which highlights the positive and heroic effects of recovery; the redemptive narrative, which has religious undertones and emphasize the search of renewal and redemption; and the toxic narrative, which are stories that do not provide hope. While some of the narratives that emerged from the aforementioned projects were progressive, many were also just matter of fact (neither redemptive or toxic), but simply a unique perspective. Memorialization is important because it shapes how people process trauma and it also shapes how later generations perceive disaster from the past, shaping policies and plans for the future. Similar to many of the other efforts analyzed throughout the chapter, the projects in this category also suffer from financial sustainability.
Economic Self-Determination: Income-Generate

These projects move beyond the goals of information-sharing, organizing, deliberating, networking, and memorializing to a form of economic self-determination because they provide participants with valuable skills for the workforce or avenues to contribute to the one’s local economy. Accordingly, these initiatives involve education of media production and media literacy training. They use media and tech not only to amplify voice, but also to amplify an individual’s capacity and reach aspirational goals. Rather than “feeling better” or improving introspection, these initiatives aim to leave people “better off.” This category refers to projects in which the content and infrastructure are community-run and autonomous, mostly free from corporate or government control, though at times do require some level of collaboration with these partner organizations. The type of communication system or infrastructure available to a community also determines the amount, quality, and types of knowledge available to and about that community (Friedland, 2015).

The two main case studies in this dissertation fall into this category: 2-Cent Entertainment and Red Hook WIFI. Both these endeavors aimed to teach participants media skills that they could then use to not only tell their own stories, but also find employment – or generate an income. Chapters 4 and of this dissertation will outline these cases, so I only provide brief descriptions of them in this section.

Table 3.13 Economic Self-Determination Examples

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<tr>
<th>POST-KATRINA</th>
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<td>New Orleans Video Access Center (NOVAC)</td>
<td>Red Hook WIFI</td>
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<td>2-Cent Entertainment</td>
<td>Resilient Networks NYC</td>
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Post-Katrina

Although founded at different times, the missions of the New Orleans Video Access Center and 2-Cent Entertainment were the same: “media for us by us” (Odums, 2016). However, the media produced by both groups have audiences beyond the community it was produced by, and the story of each group also demonstrates the challenges of economically benefitting from the production of true community media.

Table 3.14 Timeline of Economic Self-Determination Examples Post-Katrina

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| Internal/External | | |

1. **New Orleans Video Access Center (NOVAC)**

Before Katrina, the most devastating hurricane to hit New Orleans was Betsy on September 9th, 1965. Similar to Katrina, it disproportionately affected lower-income communities of colors such as the Lower Ninth Ward and the Seventh Ward. Several of the New Orleans Video Access Center founding documents state the devastation of Hurricane Betsy as one of the reasons for the organization’s founding, claiming the need to train residents of these neighborhoods in media production so locals could create culturally-relevant content with important information about access to resources. One grant document from 1972 to the National Endowment of Arts stated, “After Hurricane Betsy, low-income communities of color in New Orleans did not have appropriate access to media that provided information about rebuilding, recovery, and other necessary information.” Darcy McKinnon, the current Executive Director of NOVAC stated, “After Hurricanes Betsy and Camille [1965 and 1969, respectively], there was a lot of renewed interest in New Orleans, just like there is now [post-Katrina], and a lot of cultural production around it.”

NOVAC was founded by Louis Alvarez and Burwell Ware in 1972 as an AmeriCorps VISTA program.61 The 1970’s was an era where “proponents of grassroots video saw the medium as a means to an end – community organizing. Their primary focus was to use portable video to effect social change” (Boyle, 1992, p.72). The founders wanted to get audio visual equipment into the hands of those affected by social injustices (Interview with Louis Alvarez, 2017). The 1970’s was also the era of regulation debates regarding the growing cable industry (Light, 2003; Boyle, 1992).

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61 AmeriCorps VISTA is a national service program designed to help alleviate poverty, and was founded by John F. Kennedy, though it began operation in 1965 after his death.
Activists and scholars pushed cable television as an infrastructure that would democratize the flow of information, which would address a fundamental cause of social and economic inequality: access to information. Accordingly, when federal laws required local origination programming and public access channels for most cable systems, the medium seemed to promise a utopian era of democratic information, functioning as a decentralized alternative to the commercially-driven broadcast system (Light, 2003; Boyle, 1992). In its early years, NOVAC was a strong advocate for the development of a cable franchise advantageous to the city, especially its low-income inhabitants. The organization formed a broad-based, diverse coalition with the Free Southern Theater, the Urban League, and Tulane University, which led to a mayoral task force to ensure community involvement in cable television policy.

Andrew Kolker – a filmmaker in Brooklyn as of 2017, and one of the first VISTA volunteers for NOVAC – recalled, “We were trying to do things in lower-income communities of color with videos. It was very early video. It was old black and white portapaks…we attempted via video to intermediate problems [in these communities]…that's why NOVAC was around. To have some kind of access for folks who did not have a voice.” While the goal of NOVAC was to train residents in communities of color to produce media as a form of political empowerment, and to earn an income from doing so, this proved more difficult than anticipated (Kolker, 2017; Alvarez, 2017). Most residents in target neighborhoods did not have the time or wherewithal to learn media production. The model was that VISTA volunteers (mostly white individuals) would enter these communities and form relationships with residents to produce media collaboratively.

One of NOVAC’s biggest accomplishments, speaking directly to the needs of information access post-Betsy and “media for the community by the community” was closed-circuit programming known as Survival Information Television (SIT). SIT was produced until the late 1970’s. Working closely in a workshop format with residents of low-income communities of color, NOVAC vistas identified issues that were affecting lower-income New Orleanian families such as eviction, eating healthy on a budget, gentrification, police brutality, breastfeeding, and healthy pediatric and post-partum care.

Community members would act in the pieces to both attract and educate their audience. The videos included informative skits and advertisements that communicated solutions to these issues. For example, the videos spread the word about free facilities to those who needed them the most. Proper dissemination was critical, and in order to reach the right demographics, videos would be played on tape loops in hospitals, courthouses and social service waiting rooms (Alvarez, 2017; Kolker, 2017).

Survival information television ended by the late 1970s. By the 1990s, it was very difficult to keep the organization afloat and it became rudderless because Cox Cable took over programming in the city (Personal Interview with Darcy McKinnon, 2016). New Orleans Access Television (NOA-TV), which is a department in the city, is and was funded through Cox Cable franchise fees made NOVAC less relevant. According to its mission statement, “NOA-TV exists to encourage, create and produce
quality programming, which serves the needs of the New Orleans community. It is a goal of NOA-TV to improve the economic, cultural, and social diversity of the city, and to provide media access for a variety of community/social perspectives” (http://noatv.com/about.php).

By the mid-1990’s, there were few grants that supported NOVAC’s original mission of “media for the community, by the community” (Personal Interview, Dunneback, 2016). “Giving people voice was and is not enough of a mission for funders anymore,” said NOVAC’s current executive director, Darcy McKinnon. Funders began to ask: How is NOVAC and its cultural production contributing to the local economy? (Dunneback, 2016; McKinnon, 2016).

When Hurricane Katrina struck in 2005, the organization was hanging on by a thread, grappling with this question. At that point, their main programming involved different types of media education and training programs for residents across the city, support for independent filmmakers in the area, and organizing film festivals. Tim Ryan served as the executive director of NOVAC post-Katrina (2005-2009) and launched an initiative called “The Drive.” Shortly after the storm, NOVAC organized a group of local filmmakers to create a series of brief documentaries on post-Katrina New Orleans.

Elizabeth Dunneback, who served as the organization’s executive director from 2009-2012, discussed how non-profit organizations in the New Orleans became very competitive with one another to acquire the limited post-Katrina dollars out there. Nonetheless, two large funding opportunities helped give the organization a new life. First, Louisiana’s Motion Picture Investor Tax Credit provides film productions up to a 30% transferrable credit on total qualified in-state production expenditures, including resident and non-resident labor. This attracted many film crews to the state and New Orleans after Katrina. NOVAC saw this as an opportunity to prepare their constituents for new jobs that would emerge in the state’s growing creative industry.

Then in January 2006, NOVAC received a federal Community Block Development Grant (CBDG) from the Department of Housing and Urban Development (HUD) to fund a workforce initiative – the Louisiana Film Crew Training program (McKinnon, 2016). NOVAC has trained and certified over 1,500 local individuals (most of whom are considered low to moderate income by HUD standards and were displaced by Hurricanes Katrina and Rita) to obtain entry level jobs in New Orleans’ film industries. Trainees learn grip and electric, scenic painting, set design and construction, wardrobe, and production assistance (McKinnon, 2016; Dunneback, 2016). Continued funding from CDBG and the New Orleans Mayor’s Office of Cultural Economy, has allowed NOVAC to continue training locals in film, new media, and creative industry jobs. Additionally, HBO uses NOVAC’s workforce development model to train community members wherever their episodic shows are produced.

McKinnon sees the programming as extremely successful. She stated, “On the one hand, participants have the classroom knowledge, that's a technical skill. On the other hand, they have the ability to gain economic opportunity. Voice comes from economic opportunity.” By this, she
means that it may be more powerful to support oneself than simply have avenues for participation in media and public life.

2. **2-Cent Media**

The story of 2-Cent Media Collective begins approximately six months before Katrina, around the time YouTube was founded in February 2005. A group of African-American undergraduates at the University of New Orleans as well as some high school students from Algiers and the 7th Ward had the idea to start their own media collective to create television shows and music videos about the experiences of black men in New Orleans, and publish them on YouTube. These young people felt that they were never represented on New Orleans Access Television, and wanted to produce news and entertainment that was relevant to them and culturally appropriate. 2-Cent uses comedy, satire, rap, hip-hop, and social documentary to discuss race in New Orleans.

The group had no funding and self-published two videos about black male identity, double-consciousness, and racially aggressive policing in NOLA before Katrina hit. After the disaster, 2-Cent members were dispersed throughout the country, but a core group of eight individuals stayed committed to the goal of the collective, and reunited in Atlanta during February 2006 to produce a video about Katrina evacuation. Upon returning to NOLA, they focused their media productions on the racism that occurred during recovery and rebuilding in New Orleans (Odums, 2015).

Their most famous episode, which won an award from National Association for the Advancement of Colored People (NAACP) is *New Orleans for Sale*, which “convey[ed] the frustration felt by many New Orleanians as the city [had] become a national spectacle and a backdrop for countless national politicians, while the aid the city need[ed] to rebuild still hadn’t arrived” (Flaherty, 2009). *New Orleans for Sale* shows large tour buses exploring the devastated Lower Ninth Ward, a primarily African-American neighborhood, and sarcastically asks audiences if it even makes sense to rebuild since the city was profiting from disaster tourism.

More recently, 2-Cent Media Collective offers media production and literacy programs in New Orleans public schools. “These skills are vital for today’s economy,” said Brandan Odums, founder of the group. 2-Cent Media Collective has evolved from producer to educator, and while they don’t control a communication infrastructure, they are trying to build a strong network of young media makers in New Orleans that have skills to “make and give their two cents.”
Post-Sandy

Rather than content, the post-Sandy examples are focused on community-controlled communications infrastructure that can facilitate the production of community media.

Table 3.15 Timeline of Economic Self-Determination Examples Post-Sandy

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<tbody>
<tr>
<td>RED HOOK DIGITAL WIFI</td>
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<tr>
<td>RESILIENT COMMUNITIES NYC</td>
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| Internal | | |
| Internal/External | | |

1. Red Hook WIFI & Resilient Communities NYC

This case was briefly summarized in the Inform section of the typology (p. 71-72). The main philosophy of Red Hook WIFI and the Resilient Networks NYC is that low-income neighborhoods should have their own communication infrastructures for disaster situations, but also for economic and community development. Resilient Communities NYC summarizes this clearly in their mission statement:

Resilient Communities NYC addresses the interrelated issues increasingly facing many marginalized communities in American cities, including the impact of climate change, limited technology access and ownership, decreasing public investment, concerns around digital privacy and data stewardship, and a need for training and employment opportunities (Byrum, 2015).

If residents of a certain neighborhood can manage that community’s communication infrastructure through a local Wifi network, not only will money stay within the neighborhood (rather than go to a third-party Internet Service Provider), but there are also unique opportunities for hyperlocal content creation. This will be discussed in the next chapter.

Income-Generate: Conclusion

This category is the most complex and embodies components of each preceding category. As seen with NOVAC’s organizational evolution, projects in this category highlight a tension between creative expression and economic development. NOVAC and Red Hook WIFI changed their organizational missions in order to have financial stability post-disaster. This meant programming strayed away from communication rights and political empowerment, and focused more on skills building and job placement. This theme will be explored further in the next two chapters.
### Table 3.16 Post-Disaster Community Media Typology

<table>
<thead>
<tr>
<th>Primary Action</th>
<th>Community Media Type</th>
<th>Definition</th>
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<tbody>
<tr>
<td>Inform</td>
<td>Resource Sharing</td>
<td>To give someone facts or information</td>
</tr>
<tr>
<td>Investigate</td>
<td>Bottom-Up Journalism</td>
<td>To carry out a systematic or formal inquiry to discover information or examine the facts</td>
</tr>
<tr>
<td>Incite</td>
<td>Organize for Place</td>
<td>To move facts or information to action; stir up; spur on; urge on in a certain geography</td>
</tr>
<tr>
<td>Include</td>
<td>Crowd-Sourced Deliberation</td>
<td>To gather and discuss facts or information</td>
</tr>
<tr>
<td>Interact</td>
<td>Therapeutic Networking</td>
<td>To support one another emotionally using facts or information</td>
</tr>
<tr>
<td>Interpret</td>
<td>Memorialization</td>
<td>To explain or tell the meaning of facts or information for present and future audiences</td>
</tr>
<tr>
<td>Income-Generate</td>
<td>Economic Self-Determination</td>
<td>To create a livelihood from the creation and dissemination of facts or information</td>
</tr>
</tbody>
</table>
Evolution of Community Media Type

Figure 3.12 maps when the different types of community media emerge in relation to one another. The arrows signify evolution of activity and the dashed line represents simultaneous purposes/outcomes. I uncovered these patterns and relationships from the forty post-Katrina and post-Sandy examples described throughout Part 1. Some of the community media examples begin and remain in one or more categories whereas others change categories over time. It is important for scholars and practitioners to understand how post-disaster community media transforms over time to better address specific groups’ needs as well as tackle the disparity of access to knowledge via media production.

Unsurprisingly, the most urgent and immediate purpose is resource-sharing, which occurs right before, during, or immediately after the disaster event. Some resource-sharing initiatives evolved into bottom-up journalism or therapeutic networking programs. For example, the Katrina Aftermath Radio Project (KAMP) began as a low-power FM resource-sharing endeavor among evacuees in the Houston Astrodome, and became a therapeutic networking project as participants disseminated their survival stories on the air and connected with one another in the process. The Katrina bloggers are also an example of people who began writing online to simply share and obtain information, and then in the process became bottom-up journalists (such as Karen Gadbois of The Lens or Bart Everson of b.rox.com). These bottom-up journalists then found support in the digital communities they fostered such as Rising Tide, and were also able to use their blogs and networks to
organize for place. Occupy Sandy and Red Hook Twitter are examples of how social media platforms for resource-sharing were simultaneously used to organize for place. In general, the four categories of resource-sharing, bottom-up journalism, therapeutic networking, and organize for place are strongly correlated.

Several of the organize for place initiatives transformed into crowd-sourced deliberation projects. These include New Orleans neighborhood Yahoo groups, Neighborland, and the Jersey Shore Hurricane News Facebook Page. Actually, the evolution of the Jersey Shore Hurricane News (JSHN) Facebook page follows the clear path from resource-sharing to bottom-up journalism to organize for place to crowd-sourced deliberation. Both the neighborhood Yahoo groups and Neighborland began as endeavors to incite action in specific geographic areas, and used different platforms to include as many people as possible in the process to do so.

Therapeutic networking ventures often became ways to memorialize the disaster. Mondo Bizarro’s I-10 Witness project and Sandy Storyline started as an oral history projects to “rebuild oneself” (Slie, 2016) and “build community by getting [people] out of the closeted spaces of [their] own heads” (Premo in Spayde, 2013, p. 32), respectively. Now these collections of digital recordings serve as online testaments to people’s unique lived experiences during and after Katrina and Sandy. Similarly, the New Orleans Kid Camera project was started to help youth of color use media arts to cope with stress and trauma. Today their images provide a history of post-Katrina New Orleans through an often-overlooked perspective. By default, the many blogs that emerged and connected evacuees after Katrina also serve as forms of memorialization – either on the Internet or in forms of published anthologies such as Cynthia Joyce’s Please Forward: Hope Blogging Reconnected New Orleans after Katrina or Sam Jasper and Mark Folse’s A Howling in the Wires: An Anthology of Writing from Postdiluvian New Orleans. As Joyce (2015, p. 20) writes in the introduction of her book, “Each of these entries is an important reminder of a time and of an online community...”

The last category of economic self-determination embodies many of the qualities of the other community-media types. Ideally, projects in this category achieve goals for the six preceding types. Either an initiative originates in this category or the only pathway is to begin as a resource-sharing project. It is linked to memorialization as well because often that is a goal for initiators of projects in these categories. After Sandy, Red Hook WIFI’s main role was to allow the Red Hook Initiative, residents, aid workers, and anyone in the area with a device to be able to communicate information within and outside the neighborhood. Red Hook WIFI then transformed into the Red Hook Digital Stewards program, which trains young adults in the community to build and maintain the network as well as learn about tech and media production while earning an income and gaining employment skills for the future. Resilient Networks NYC is based on the Red Hook WIFI model and is equipping community-based organizations in six other climate-vulnerable areas across New York City to implement a similar autonomous communication infrastructure and jobs training program.

NOVAC and 2-Cent Media Collective were conceived of as economic self-determination projects from the start. Initial mission statements from both groups emphasize the traditional
definition of community media, which is “the production of media by us, for us.” Both groups also
place importance on earning an income through media production skills, even though this proved
hard to achieve. The video-based products created by NOVAC and 2-Cent Media pay tribute to those
who lived through Sandy and Katrina, and this memorialization was also an aspiration of both groups
(hence the dashed line connecting memorialization and economic self-determination in Figure 3.12).
While the VAYLA Vlogs were inspired by Leo Chiang’s documentary, A Village Called Versailles, with
the primary purpose of controlling and memorializing a narrative in East New Orleans, founder Huong
Nguyen aimed to train participants in media literacy and production skills for the job market. These
dual purposes depict another example of the dashed line between memorialization and economic
self-determination.

Table 3.17 Media Tools and Media Types from Hurricanes Katrina to Sandy, 2005-2012

<table>
<thead>
<tr>
<th>MEDIA TOOL</th>
<th>Media Tool 1</th>
<th>Media Tool 2</th>
<th>Media Tool 3</th>
<th>Media Tool 4</th>
<th>Media Tool 5</th>
<th>Media Tool 6</th>
<th>Media Tool 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Radio</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<tr>
<td>Blog</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<td>X</td>
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<tr>
<td>Website</td>
<td>X</td>
<td>X</td>
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<td>X</td>
<td>X</td>
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<tr>
<td>Audio Record</td>
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<tr>
<td>Video</td>
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<tr>
<td>Social Media</td>
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<tr>
<td>Chat Apps</td>
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<tr>
<td>Wifi</td>
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Table 3.17 identifies the different ICTs that individuals and groups used to create or
participate in the various community media examples on which this study is based. Aside from radio,
every other tool is Internet-based. While Wifi facilitates the purposes that correspond to each
community media type, Table 3.17 only portrays what occurred within the projects I studied. Groups
and individuals have used social media sites such as Facebook and Twitter to achieve the outcomes
of all seven types of community media. I tried to analyze usage of media tools and involvement in
each community media type by race/ethnicity and socioeconomics, but did not see any clear patterns
across these factors. While the majority of post-Katrina bloggers were middle-class and White, every
other tool and community media type included diverse makers and participants by race and income.
For example, the dispersed Vietnamese community in New Orleans East was able to stay connected through a distributed radio network post-Katrina, and vlogging helped the young people of that same community to assert their identity moving forward. The storytelling occurring through Red Hook’s twitter account and Occupy Sandy’s twitter account helped specific physical communities obtain needed resources. The investigations and reporting of concerned residents and displaced evacuees through blogs led to the uncovering of city scandals, the implementation of new policies, and the creation of needed news publications that contributed to the larger information base of the city. Often the work of these amateur journalists found its way into mainstream media, helping to disrupt dominant narratives (even though they were not paid for their labor).

Other participatory bottom-up journalism endeavors including The Trumpet, The Listening Post, The Messenger, and the Jersey Shore Hurricane News Facebook Page gave ordinary people platforms to share and exchange their experiential knowledge. The act of doing this facilitated trust among strangers in hyperlocal digital space, which led to stronger social ties in physical space. Meanwhile, through personal storytelling, the Katrina bloggers developed completely new social communities that did not exist in New Orleans before the storm, and Yahoo Groups enabled existing communities — the residents of neighborhoods — to organize around physical plans, programs, and protests. However, not all of the digital activities necessarily led to the creation of new communities or strengthened existing ones. The America Speaks Mediated Town Halls and Neighborland provided a means for authorities to converse and crowdsourced from several individuals representing various communities regarding specific developments in the city.

In general, the connections people formed and stories they shared via ICTs helped individuals process their trauma individually and collectively as seen through Mondo Bizarro and Sandy Storyline. The act of documentation either through audio, video, or the written word using ICTs not only allowed individuals and communities to process and archive their memories, but legitimized their realities. The projects from the memorialization category demonstrate that ICTs not only allow people and communities to amplify voice, but also package that voice in a way that elevates authenticity. For instance, an unedited video from an individual’s iPhone shows exactly what the person saw while recording. At the same time, curated narratives that have a professionalized visual quality from Sandy Storyline and Land of Opportunity legitimize the non-expert’s experience because the “professionalization” is convincing to viewers. Several contributors of participatory initiatives such as Bridge the Gulf and others spoke about the pride and power of seeing their words on the Internet or their images and videos on the big screen on an official platform. Lastly, projects such 2-Cent Media, NOVAC, Red Hook WIFI, and Resilient Networks NYC help residents, stakeholders, and practitioner control and imagine media and communication infrastructures in low-income, minority neighborhoods.
Conclusion

Table 3.18 Outcomes of Community Media (below) synthesizes the various results of the 40 examples studied in this project to understand how and why community media matters at the individual, collective, and urban level, and how it contributes to resilience. I define individual as a single person and collective as a group of individuals bound together by one or more of the following: spatial commonality, race/ethnicity, socioeconomics, cultural similarities, shared experience, values, goals, political causes, etc. I define urban as the catchment area of these collectives that comprise a city or region. These individual, collective, and urban gains tend to be interrogated by different disciplines including psychology, sociology, planning, political science, public policy, and communications. I weave these various approaches together in Table 3.18 and argue that each box is a valuable gain that scholars and practitioners should be aware of when evaluating the success of community media efforts or the use of ICTs in civic engagement and participation processes.

Table 3.18 Outcomes of Community Media

<table>
<thead>
<tr>
<th>GAINS</th>
<th>Individual</th>
<th>Collective</th>
<th>Urban</th>
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<tbody>
<tr>
<td>Recognition</td>
<td>Therapy and support; Self-awareness</td>
<td>Processing collective trauma; group identity assertion</td>
<td>Disruption of dominant narrative as evidenced in news outlets and public dialogue</td>
</tr>
<tr>
<td>Instrumental Capacity</td>
<td>Sense of empowerment; self-efficacy</td>
<td>Stronger social ties; formation of new collectives/communities; collective efficacy</td>
<td>Expanding knowledge bases by diversifying sources; Fusion of expert + local knowledge in policy making/creation of physical plans</td>
</tr>
<tr>
<td>Asset Creation</td>
<td>Acquisition of media production + media literacy skills; employment; job readiness</td>
<td>Acquisition of public and private resources and assistance; neighborhood-run communication infrastructures</td>
<td>Public investments; Inclusive policy and plans; Economic development and workforce training programs</td>
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There are three types of gains from community media, which come in the form of recognition, instrumental capacity, and asset creation. Recognition refers to individuals acknowledging their own and others’ emotions, a community acknowledging their shared experience and collective identity,
and those in power acknowledging a counter narrative to the dominant point of view. As seen through the Katrina bloggers, Mondo Bizarro I-10 Witness participants, Sandy Storyline contributors, or VAYLA youth, the act of creating media forced one to recognize their emotions. This is therapeutic because it provides individuals a platform to share and unpack their trauma. When individuals connect using ICTs and process this trauma together, a group identity is affirmed and asserted. Once there is a critical mass of people recognizing their shared, but unique experiences and emotions, this can lead to the disruption of the dominant narrative in the public arena.

Instrumental capacity refers to the fortitude, tactics, and strategies needed to achieve a goal or make something happen. When creating community media, an individual becomes empowered, gains a sense of belonging, and realizes one’s self-efficacy. This was reiterated throughout my interviews with makers who described the phenomenon of finding their voice. Self-efficacy and empowerment are the instruments used at the individual level to be an agent of change. Psychologist Albert Bandura refers to self-efficacy as the belief in one’s ability to accomplish a goal. In this case, self-efficacy is about believing that one’s voice matters. This sense of belonging and self-efficacy then transforms into collective efficacy, which is the members of a group working towards a common aspiration. When this occurs, diversified knowledge bases emerge in the city through media institutions, educational institutions, non-state actor institutions, and government institutions. This can lead to the fusion of expert and local knowledge in policy and planning. The Yahoo Groups that galvanized around neighborhood plans or the young Vietnamese activists that formed VAYLA, fought against the placement of a toxic waste site in their neighborhood, and vlogged exemplify this.

Asset creation refers to tangible goods, products, skills, sustenance, and capital. Several of the examples throughout the typology showed how individuals gain valuable media production and media literacy skills by participating in initiatives. These skills can lead to job readiness and employment, as well as the ability to be more aware and discerning in the consumption of information. It is this awareness that helps foster an engaged citizenry (Appadurai, 2006). Several of the examples also demonstrated how when an individual uses these skills in innovative ways, one’s community benefits through the acquisition of public and private resources as demonstrated by low-powered FM radio and Occupy Sandy social media; or the creation of neighborhood-controlled communication and information infrastructures as seen in Red Hook. If successful, the city (or a private investor in the case of Neighborland) may invest in these grassroots efforts to turn into self-sustaining businesses or even replicate programs to foster workforce development and economic development in specific neighborhoods.

Next, chapters 4 and 5 (the in-depth case studies), will now provide a deeper look at how community media initiatives provide these aforementioned multi-scalar gains and the individual, collective, and urban level.
PART III
Chapter 4

2-Cent Entertainment: Even if your voice shakes, you have to give your two cents.

*What would MLK do if he had YouTube? What would Gandhi do if he had a Twitter? What would Gordon Parks do if he had an Instagram?* – Brandan “B-Mike” Odums, Founder of 2-Cent Entertainment LLC

CHAPTER SUMMARY

2-Cent Entertainment was officially founded in 2005, approximately six months before Hurricane Katrina hit New Orleans and flooded over 80 percent of the city. After the disaster, the collective partnered with the People’s Hurricane Relief Fund (PHRF), and focused on exposing untold narratives about rebuilding and recovery through YouTube, which was also founded in 2005. Members of 2-Cent Entertainment see themselves as pioneers of the video-sharing platform. This chapter tells the story of 2-Cent Entertainment and how they began as grassroots video producers and transformed into media educators for youth throughout the city. It analyzes the impact of 2-Cent Entertainment’s work on the media makers themselves, as well as greater New Orleans. Finally, it concludes by using this case to shed light on the initial research questions: did 2-Cent’s grassroots media lead to new forms of social relations and civic engagement in the digital era? What are the benefits of 2-Cent Entertainment’s community media and what scales (individual, group, city-wide) do these gains manifest?

Introduction

Brandan “B-Mike” Odums, the founder of 2-Cent Entertainment, believes that Martin Luther King Jr. would want to disseminate his speeches through YouTube and that Malcolm X would love to make mixtapes for distribution on the streets. After Hurricane Katrina, Odums was devoted to using new tech tools and platforms to share the Black perspective on recovery and rebuilding, as well as to advocate for justice. While none of the members of 2-Cent I spoke with underscored that their media products emphasized a class-based perspective on recovery and rebuilding, issues such as poverty permeate most of their videos. “Mainstream journalists as well as local and federal policy officials were trying to find authentic voices from New Orleans to understand what was truly happening. And through YouTube, we became one of those voices that people wanted to listen to...” Odums told me.

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62 LLC stands for Limited Liability Corporation (LLC), and Members of LLCs are not personally liable for debts incurred and creditors cannot seek assets from LLC members. No one I interviewed could give me a straight answer as to when 2-Cent actually became an LLC. However, according to Louisiana business filings, the group registered on June 10th, 2005 as an LLC and their most recent report was filed on September 7th, 2017. Brandan Odums and Kevin Griffin are listed as the registered agents. The first YouTube video that refers to the group as an LLC are the Freedomland interviews from January 2007. Additionally, in conversation and interviews, the group members often refer to themselves as 2-Cent Media, and sometimes 2-Cent Entertainment. Since many of their YouTube videos have a 2-Cent LLC logo, I have referred to them as 2-Cent Entertainment throughout the chapter.
I interviewed eight members of 2-Cent Entertainment and analyzed all of their YouTube videos regarding Katrina (2007-2015) to better understand the group’s story and trajectory. This case-study shows that grassroots media is not only necessary to uncover truths about disaster recovery and rebuilding, but also reveals how the group process of creating such media is therapeutic at the individual and community level. It helps people recognize their situation and organize around issues. Since 2-Cent never became an official non-profit organization or for-profit entity, their innovative ideas were not supported by foundations or other institutions. The group is an example of New Orleans cultural organizing in which social justice work and the arts are interconnected. These sorts of grassroots initiatives were often ignored by funders and policy officials after the storm because of their informality (Flaherty, 2010). However, through mentoring and teaching younger generations of Black New Orleanians how to use, produce and circulate their own media, 2-Cent members hope their ideology will thrive and replicate.

How It Started

When Odums was a high school student at the New Orleans Center for Creative Arts (NOCCA) from 2001-2003, he was captivated by media production. At age 17, he got an internship at New Orleans Access Television (NOATV), the public access station in the City and worked there as a camera operator during the summer before college. He continued his position even as a student at the University of New Orleans (UNO). Odums described the programming at that time: “Typically, the nature of the content was individuals who stood on their soap box to speak whatever their truth was. It was a lot of community leaders...” Odums was learning so much about the diverse experiences and viewpoints in New Orleans, and thought it was a shame that none of his friends or anyone in his generation was watching the channel (Personal Interview Brandan Odums, 2016). He continued:

I felt like it was such important content because I was learning so much about politics, about a certain alternative perspective that you don’t see in the mainstream media. You see all this stuff about the problems in New Orleans, but yet here were many people on different soap boxes that were putting out a different point of view. Most of it was racial. Most of it was grassroots. Some of it religious. Most of it just was from this perspective that you don’t really hear.

Odums knew he and his friends, a group of African-American young adults (ages 15-21) also had “a truth to share” on life in the city. In the Fall of 2004, during his senior year of college at UNO, Odums had an idea: to create more public programming that reflected the Black youth and Black young adult experience in his city. He also wanted to create content that would be exciting for his peers to consume, and took on a different form than what he filmed during his NOATV internship. He pictured sketch comedy, rap, hip-hop and labelled his vision “edutainment” – the merging of education and entertainment (Odums, 2016).
Amanda Rose (who goes by Manda B.) and Odums, both grew up in New Orleans, and have been good friends since junior high school. Manda B. was studying theater arts back then and remembered, “Brandan kept approaching me about this idea, a cross between Sesame Street and Dave Chappelle, which made completely no sense to me. I was like, ‘Whatever, I’m down for the get down’” (Personal Interview with Manda B., 2016). Odums recruited ten friends, mostly other students at UNO along with some people who he grew up with in Algiers, such as Kevin Griffin, to produce a pilot episode about the Black experience in New Orleans. Griffin liked the idea because – unlike Black Entertainment Television (BET) or MTV – he wanted to portray Black people in a more positive light (Personal Interview with Kevin Griffin, 2016). Griffin had also been incarcerated for five years at the age of ten. He joined the collaborative shortly after he had been released at age 16 in 2004, and felt 2-Cent gave him purpose. Nik Richard and Madania Ali Graves, who both grew up in the city, were classmates with Odums at the University of New Orleans (UNO) and were excited about the possibility of showcasing their poetry on television. Stephen Harrell Jr. also attended UNO, but only joined the collective after Katrina, and reflected that it provided some structure to his life amid the chaos of rebuilding (Personal Interviews with Nik Richard, Madania Ali Graves, and Stephen Harrell Jr., 2016).

At UNO, approximately eleven months before Katrina, neither Odums nor his friends realized they were signing on for a much longer-term commitment. They began work on their project that Fall. “We did everything from the writing to acting to filming to editing,” said Kevin Griffin. Odums borrowed camera equipment, microphones, and lights from NOATV. In 2005, no one had video cameras on their cell phones so when people saw Odums and friends in the streets filming, they assumed they were professionals. “I loved that people thought we were real video producers. They took us very seriously,” remembered Griffin.

The first episode was inspired by W.E.B. Du Bois’s concept of double consciousness. In The Souls of Black Folk, Du Bois (1903) famously describes the phenomenon:

It is a peculiar sensation, this double-consciousness, this sense of always looking at one’s self through the eyes of others, of measuring one’s soul by the tape of a world that looks on in amused contempt and pity. One ever feels his two-ness,— an American, a Negro; two souls, two thoughts, two unreconciled strivings; two warring ideals in one dark body, whose dogged strength alone keeps it from being torn asunder.

Double consciousness forces Black people to constantly negotiate these two views of themselves – their own sense of self and how White people see them. In 2-Cent’s first video project, which they began work on in 2004 and completed in 2005, they included a sketch in which a Black man was trying to propose to his girlfriend. As he dug into his pocket to search for the ring, policemen assumed he was searching for a gun. Thus, in self-defense, officers began shooting at him. Odums explained, “It’s stuff like that Du Bois was referring to when he asked ‘how does it feel to be a problem?’ In a very humorous way, we were trying to be as extreme as possible.” While neither Odums nor his friends
experienced that exact incident, they knew it was hypothetically possible. Another sketch shows the inner monologue a Black man has when walking down the street, and how to make sure he was perceived as safe by everyone around him.

Family, friends, and classmates overflowed a classroom in February 2005 to watch what the media collective created. Manda B. and Odums recalled how at the time there was no digital social network to spread the word about their work so most of the people in the room were from their personal networks. They also recalled that everyone in the room was Black. Once they screened their 45-minute episode at UNO, they were thrilled with the reception (Odums, 2016; Manda B., 2016; Griffin, 2016). The main response from audience members was: “This is so well-done and it’s so needed!” (Odums, 2016; Manda B., 2016; Griffin, 2016). Odums stated:

> It was like this real emotional-type almost spiritual thing that was happening in this room where people were in tears, and all of us had worked so hard on it, so we were in tears...
> It bridged the generational gap that was in the room. The elders recognized it as something of value and important. The young people recognized that it was funny and it was entertaining.

They immediately began work on their second episode, which they titled “How Does Hip Hop Affect the Community?” and filmed all summer until Katrina happened at the end of August. The ten founding members of the collective were no longer in the same place. One member stayed in New Orleans while others evacuated to Atlanta, Georgia; Houston, Texas; and Los Angeles, California.

2-Cent Entertainment during and after Katrina

“How do we capitalize off of all of those stories that are not being told?” – Manda B.

Like every other New Orleanian, the ten founding members of 2-Cent were devastated and confused after Katrina. “No one knew what was going on except that the city was in complete chaos,” stated Griffin. The collective stayed in touch with one another through texts and phone calls, but their media work paused for approximately four months. Most of them got information about what was happening in post-Katrina New Orleans through family and friends (word of mouth) or national television and print news, and were horrified by the way Black people were portrayed on television. “Why were Black people always shown to be looting and killing?!,” exclaimed Odums during an interview. They were struck by how the extreme parodies in their first video about the perception of the Black male were actually playing out in the streets of post-Katrina New Orleans (Odums, 2016).

These offensive misrepresentations motivated the group to reconvene and continue work on their second episode. Seven out of the ten members were able to move to Atlanta (except for Manda B., Kevin Griffin, and another friend who remained in New Orleans). Together the group edited the

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63 Facebook launched in 2004, but remained exclusive until 2006. YouTube had launched in February 2005, but the 2-Cent members did not know how to use it yet.
footage that they had shot several months prior and started to brainstorm the future of their collective. Griffin and Manda B. also took part in these conversations, albeit remotely via conference calls (Odums, 2016). Often these brainstorm sessions would be about piecing facts together from the mainstream news and making sense of it alongside information they received from relatives and friends. They would ask one another, “Why is there no reliable source of facts or a platform of opinions that represent us?” I asked the several members of 2-Cent if they were plugged into the post-Katrina blogging scene discussed in chapter 3, but none of them were part of this virtual community and to their knowledge, none of their friends were bloggers either.

Once Mayor Ray Nagin began allowing people to re-enter the city, Odums started visiting regularly from Atlanta – almost every weekend. He had family and friends there that did not evacuate, and felt very disconnected from home. “Because I would come back to New Orleans a lot, we did a screening of the second episode in one of my homie's living rooms, and invited some people. We did another screening at my father's church, but it was little small stuff.” Once again, audience members were moved by the content and expressed how needed this type of media was especially during those crisis times of low morale in the Black community. Given that so many other relatives and friends were dispersed across the United States, the collective wanted to use the Internet to share their new episode and thus posted it on MySpace. “I don't know how, but it was cool to see someone you hadn’t talked to in years comment on the video. We told our social networks about it, but all sorts of people were finding it online,” said Griffin. Another member, Stephen Harrell Jr. echoed this and added that he was amazed to see people from Norway and South Africa commenting on the videos. “We had a global audience and that was empowering.”

Within a year of Katrina, all the original members of 2-Cent Entertainment found their way back to New Orleans. Many of the individuals I interviewed described how their commitment to the collective is what helped bring them back to the city. Some suggested that if they did not have the purpose of 2-Cent, they may not have returned. “I just felt it was my calling,” stated Manda B. “I came back because I had this desire to just basically do what we had been doing, and focus it completely on what was happening in the city,” recalled Griffin. Odums discussed how 2-Cent's mission shifted post-Katrina:

> The energy was the same, but it's just the focus became more personal. It was the same voice, but before we were speaking from the abstract. We were speaking about the hypothetical, real things that happened to Black people. But after Katrina, we became focused on what was really happening. It wasn't so much from the abstract.

By mid-2006 to early 2007, the collective was fluid and different people joined to participate in various media projects, even if only for a short time. The main members that anchored the group were Odums, Manda B., and Griffin. 2-Cent was focused on two post-Katrina projects: 1) creating a news show in collaboration with the People’s Hurricane Relief Fund and 2) producing Freedomland,
a video that featured an ensemble of local rap and hip hop artists sharing their views about life after the storm through music. Both of these media projects reference Gil Scott-Heron’s famous 1970 poem “The Revolution Will Not Be Televised” which warned readers to be wary of the portrayals of American society on television (Nichols, 2011). Scott-Heron was critiquing the commercialism and surface-level character of broadcast news, and encouraged young people to get into the streets, connect with one another, and take action (Nichols, 2011). 2-Cent’s post-Katrina videos all end with the phrase “The Revolution Will Be Televised.” As Nik Richard says in the “Voice of Reason” video, “Can somebody please tell Gil Scott Heron that I apologize, because this revolution will be televised.” 2-Cent was coming from the same mind-set as civil rights leaders and Scott-Heron, but were dedicated to using new tech tools and platforms in their fight for social justice.

**The People’s Hurricane Relief Fund and 2-Cent Entertainment Collaboration**

The People’s Hurricane Relief Fund and Organizing Group was founded on September 3, 2005 in response to inadequate support from the Red Cross, FEMA, and the federal government. On this day, the Community Labor United (CLU) coalition, which works to build strategic campaigns protecting and promoting the interest of low and middle-income working families released a powerful declaration: “The people of New Orleans will not go quietly into the night, scattering across this country to become homeless in countless other cities while federal relief funds are funneled into rebuilding casinos, hotels, chemical plants and the wealthy white districts of New Orleans...” (Flaherty, 2010, p. 73) The CLU, established by Curtis Muhammad, announced the founding of the People’s Hurricane Relief Fund and Organizing Committee (PHRF).

PHRF was a Black-led alliance directing a radical movement for the reconstruction of the city aiming to bring together the various grassroots efforts in the city. In the weeks after the storm, almost every local community organizer in the city had associated with PHRF, and wanted to collectively bring major nonprofits like the Red Cross under local community organizers’ control. The individuals that initiated PHRF including Curtis Muhammad and Malcolm Suber, a well-known New Orleans activist, invited Black nationalists, civil rights movement veterans, socialist parties, union leaders, as well as Black high school and college students from historically Black schools. They welcomed and organized hundreds of these volunteers (Flaherty, 2010). The leaders of the PHRF believed that direct aid was not enough to help Black residents and other minorities in post-Katrina New Orleans, and

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64 **Voice of Reason:** [https://www.youtube.com/watch?v=PHvpA4i-pBw](https://www.youtube.com/watch?v=PHvpA4i-pBw) (Accessed: 2017)

65 For more information about this, see Jordan Flaherty’s book *Floodlines: Community and Resistance from Katrina to the Jena Six* (2010).

66 Muhammad is a native of New Orleans and a long-time activist, During the 1960’s, he was an organizer with the Student Nonviolent Coordinating Committee (SNCC).
advocated for an overhaul of the city’s local socioeconomic and political system. “Nothing about us without us is for us” was their slogan (Flaherty, 2010).

Malcolm Suber was introduced to Brandon Odums by a mutual friend before Katrina, which is how Suber knew about 2-Cent Entertainment, and supported the group’s vision. Suber asked 2-Cent to create a webisode series about rebuilding the city from the Black perspective and the collective agreed. “We did a lot of their [PHRF’s] media work. That's where we met a lot of activists whose views were aligned with our’s and who influenced us,” Odums stated. The webisode was titled Unity and Struggle – Right to Return: News and Views, and the team made three videos, which they uploaded on YouTube and MySpace on April 13th, 2007; April 27th, 2007; and July 25th, 2007. The first episode introduced the idea behind the series, which the narrator described as “a cutting-edge documentary about self-determination.” They reported on the Take Back Our City Second Line that took place on February 19th, 2007, which spread the message that Black residents wanted to be developers of their own community. Again, a young rapper in the video said, “They say the revolution won’t be televised, but we don’t need to be televised because we be the truth.”

The second episode of Unity and Struggle features Malcolm Suber educating viewers about the “price gouging” of rents in post-Katrina New Orleans. According to Suber, fifty-seven percent of residents rented in New Orleans before the storm, and lacked housing rights once they returned. The video features a clip of a Black man testifying at a March 15th, 2007 City Council meeting stating, “Before Katrina, we paid between $400-$500 per month for a 3-BR unit, and now the landlord is asking us for $1500 per month.” Another Black woman followed and said, “A lot of these landlords do not want to rent to someone that looks like me and this city has not provided any protections for me.” City council had convened that day to discuss an Ordinance against Price Gouging that would prevent unfair rents. The episode aimed to inform and incite viewers around the issue.

Means to Recovery, the last PHRF and 2-Cent Entertainment collaboration, and also the name of a Red Cross program sought to help displaced residents. The program required that families work with a caseworker before applying and must exhaust all other resources before requesting help through the complicated 20-page application. The People’s Hurricane Relief Fund learned that the Red Cross had already given out $60 million of these funds (out of a budget of $71 million) throughout California and Texas, as well as Seattle, but not in New Orleans. As one organizer explains in the media piece, “This money was given out everywhere except New Orleans where people need it the

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67 Curtis Mohammad left PHRF to found an offshoot, the People’s Organizing Committee accusing PHRF of lacking accountability and being unwilling to cede leadership to the communities they served. Both PHRF and its offshoot, POC, formally closed their doors – PHRF in December of 2007 and POC in December 2008.

68 2-Cent Entertainment only made three webisodes because of internal strife within the organization.


70 Second lines are traditional New Orleanian brass band parades.


72 Means to Recovery: https://www.youtube.com/watch?v=SQeJDYnLY1g
most.” The program was not well advertised, and since New Orleans lacked case management organizations, there was no way to learn about the potential resource. PHRF organizers found an application to apply for these funds, made hundreds of copies and distributed them at a rally under the I-10 overpass in Treme. The video features civil rights lawyer Tracie Washington at the rally claiming that the Red Cross has committed criminal acts. “This should have been national news,” stated Minister Willie Muhammad in the video.

Two weeks after 2-Cent published their video on YouTube and MySpace, the New York Times published an article about the scandal.73 “We reported it first,” said Odums during one of our interviews. The article quotes Suber saying “What we want people to understand is that these are hard-working, poor people, and they don’t want to be treated like children in this insulting process in which they have to sit down with a counselor” (Dewan and Strom, 2007).

The MySpace page for 2-Cent no longer exists, but these YouTube videos received between 600 to 800 views as of 2017. These numbers are indeed modest. When I asked members how they evaluated the impact of their PHRF webisodes, they answered that the process of creating the pieces was energizing for everyone involved, and that is what was most important. “It made us feel like we were doing something about our situations and not just sitting around. We were getting the word out,” said Gizmo a member of the collective. While the group did pay attention to YouTube views, it did not matter to them how big the audience was for each piece. The idea was to just keep creating - to inform, to interact, to investigate, and to incite.

2-Cent members that participated in producing these videos saw themselves as on the ground activists. They did not expect or request any type of compensation for their work because they felt it was their calling. For example, in their Voice of Reason video, Richard says, “You can keep your checks because this Hip Hop is not for sale. If they control our music, they control our movement.” However, 2-Cent members did lament their lack of funds and even made a parody rap video in 2011 titled “I’m Broke” to creatively express the challenges with devoting one’s time to amplifying voice. The caption of the video reads: “Yup...after the cameras and lights turn off...and the dust settles...this is our realization...we’re still broke...c’mon network TV we hungry!!!”

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"The 2-Cent song ‘Freedomland’ gives voice to the misery, worries, anger, and social vision of New Orleans young people caught in a place defined by abandonment, blindness, coldness, and authoritarianism.” – Dr. Clyde Woods, Department of Black Studies, UC Santa Barbara, 2009

Unlike the PHRF webisodes, Freedomland is not a bottom-up journalism news show, but rather a music video that features local, up and coming hip-hop artists from East New Orleans, the Lower Ninth Ward, the Treme, and Algiers including K. Gates, The Show, Young A, Dee 1, Mack Maine, Nutt the Kid, and Dizzy. “They rapped about what the media wasn’t paying attention to…” said Harrell. Odums suggested they all join 2-Cent Entertainment to collectively produce a music video about how Katrina affected the lives of Black people. The production of Freedomland and its opening event embody both the therapeutic networking and organize for place categories from the typology.

Image 4.1 Clips from Freedomland

The hip-hop in Freedomland is also remixed with snippets of speech from Black Panther Party Chairman Bobby Seale and Reverend Martin Luther King Jr. The imagery in the video is haunting since it is shot amongst Katrina debris, dilapidated homes, and FEMA trailers. In the background, viewers see young Black New Orleanians holding signs that read: “Speak your 2-Cent” and “2-Cent Revolution” (See Image 4.1). The lyrics of the song are just as disturbing as visuals. For example:

Katrina came to the city and
He treated every Black in the 504 like Kunta.
You try to cross that bridge, they’ll shootcha.
If you was trying to get food you was a looter
Even the kids felt like they was losers...

Keep ya head up Black people...

They tryin’ make us look like heathens

But how the hell they expect us to feed us?
We lost everything from Katrina,
And now they want us to pay FEMA.
They hate we survived and it’s evident.
And they gave all the work to the Mexicans.
And spent a few mill’ on the Superdome,
They could’a spent that money on a few homes.
An’ this be the realest shit I ever wrote.
We’ll never be on top of if we don’t vote.

In addition to the song and video, *Freedomland*, 2-Cent conducted and recorded brief interviews with each artist to understand how they approached the collaborative music project. These clips, also available on YouTube, served as trailers for the final production, which premiered on February 8th, 2007 at Club 300. The *Freedomland* interview videos advertised the premiere, attempting to bring young Black audiences to grieve, mourn, and process their Katrina trauma together.

Through the interviews, it is clear that the process of creating the music video was empowering, moving, and therapeutic for the young Black artists. For example, The Show stated:

> A song of this nature and level, I can’t hold back nothing because it is a serious topic...
> Hopefully it will get you to open your eyes and look at yourself and look at your surroundings.

During his interview, The Show emphasized over and over again how he hopes *Freedomland* incites young Black New Orleanians. Similarly, Dee 1 discusses taking action in his interview. He said:
You know, people were trying to walk to safety
And they were confronted by police with guns... 
told to turn back around. The song is about not
turning around. I’m marching to freedom.

DJ Raj Smoove and Young A expressed a sense of pride and described how they want the song and video
to bring those who felt disenfranchised by Katrina to support one another.

Everybody got their Katrina song, but this
song really matters...
There will be more songs like this after this song
because I ain’t seen nothing like that.

I can’t remember another time when so
many artists in New Orleans came together
to do good.

This is a song I feel that represents the Black community
In a positive way...to bring everybody in the city together

The 2-Cent page features several hip-hop and rap songs about Katrina such as *Freedomland*
posted between 2006 and 2009. The very first upload, from March 30th, 2006, titled Dizzy Video is
the music video for the song *The Day After Tomorrow*. It is set against performer Dizzy’s storm
ravaged home in the Lower Ninth Ward. He states: “Daddys out Lootin’ and people out shootin’
because they got nothing to lose. Old folks dying because they are running out of medicine. They’re
sending in the troops to protect their wealthy, but every n***** got to protect themself.” Both
*Freedomland* and Dizzy Video have over 50,000 views on YouTube, and helped 2-Cent attract the
attention of national and international hip-hop stars such as Mos Def, who then brought more
resources and awareness to the Black community’s plight in New Orleans. In 2009, when Mos Def
was performing at the New Orleans House of Blues, 2-Cent produced a two-part documentary series
about his time in the city as they toured him around Katrina devastation (Odums 2016; Griffin, 2016).

Realizing that celebrities brought more attention to the struggles of New Orleanians, 2-Cent
started interviewing any Black figure that came to the city for music shows such as Essence Festival,
Voodoo Fest or conferences. Some of these stars found out about the group through their YouTube
page. For those who had not heard of 2-Cent before, Odums, also a visual artist would sketch their
face on a t-shirt and one of the members would then use the item to introduce the collective and
request an interview (Odums, 2016; Griffin, 2016). “People would be flattered when they’d see their
face hand-drawn,” said Griffin. Aside from Mos Def, 2-Cent produced videos featuring Fat Joe and J.
Cole in 2010, Questlove in 2011, Lupe Fiasco in 2012, Common in 2014. Odums described their
approach:

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75 Dizzy Video: [https://www.youtube.com/watch?v=xJ5jG_GwAU](https://www.youtube.com/watch?v=xJ5jG_GwAU) (Accessed: 2017)
76 Essence Music Festival showcases mostly Black artists.
We would always ask these people to give drops. Drops is just like, ‘I’m such and such, and this is my two cents.’ Mos Def was like, ‘I’m Mos Def, and this is my 2-Cent.’ He was like, ‘Speak your two cents even if your voice shakes.’ When you hear stuff like that, it’s like, yeah, we’re creating this content not to be outward political, but we’re creating this content to get young people to speak on whatever issues that hinders them and they need to bring to the lime light.

New Orleans for Sale

Poet Nik Richard, one of the original members of 2-Cent, was from Gentilly, but had many friends who lost their homes in the Lower Ninth Ward. When he would visit to help them, he would see large busses drive through the neighborhood filled with white people taking photos of the destroyed homes, as well as him and his friends. “What is going on?” “I am coming back with my own camera,” he thought to himself (Richard, 2006). Similarly, Gizmo, also one of the original members of 2-Cent, worked at a hotel in downtown New Orleans, and a saw flyers and pamphlets for a “devastation tour.” He was outraged. Who was hosting these tours? Who was profiting from these tours? Madania Ali Graves, also a founding member, lost his home in the Lower Ninth Ward and could not believe someone was profiting from his tears. These events lead to the creation of the New Orleans for Sale video, which is 2-Cent’s most famous piece (Graves, 2016; Gizmo, 2016).

Richard wrote the lyrics of New Orleans for Sale and is the main performer in the video. Members of the collective gather around him, standing tall on caved-in roofs and broken sidewalks, holding signs that read “America Did This” and “This Is What You Paid to See Right.” Richard looks straight into the camera lens and clearly states: “Hurricane Katrina was the biggest national disaster to hit American soil, and nearly two years later, this area is still devastated. But you know what? We made sure we preserved it strictly for your tourism. For about seventy-five dollars, you can take one of these many tour busses.” The shots of Gray Line busses and cars filled with white people taking photos from the windows are actual tours in progress. During our interview, Richard said to me, “It wasn’t anything that somebody told us about or something that we heard. It was something that we experienced personally. Everything you saw in that video was real, it was natural, it was unscripted.”

The video premiered at the 2008 New Orleans International Human Rights film festival and 2-Cent uploaded it on to MySpace and YouTube at the end of that year. It shed light on an issue that was unknown to most of the world (Odums, 2016). “It was only after the release of our video, did we see news outlets pick up on the exploitative phenomenon,” explained Odums. Media scholar Janet Walker (2010) argues that the video is effective because the tourists and 2-Cent members meet on a “mobilized terrain” and shows a chilling and tense interaction between those who have returned home and outsiders who knowingly or unknowingly exoticize suffering. Many entrepreneurs excelled at a form of tourism in post-Katrina New Orleans that packaged the lived experience of oppressed communities of color for the easy consumption of the privileged. By depoliticizing the environment
and ignoring racial politics, companies such as Gray Line Bus tours made the Lower Ninth Ward a safe place for tourists (Hartnell, 2009; See Image(s) 4.3).
After its release in 2008, *New Orleans for Sale* was honored with PBS’s fourth annual POV Film Your Issue award, the FYI Jury Award, the NAACP Award, a Discovery Channel Documentary Film Festival Award and the AFI SILVERDOCS Award. And even though 2-Cent was originally Odums’ idea, the entire collective took ownership of the group and the content produced. At each of these award ceremonies, eight to ten members would attend and show up at the podium to accept the honors (Griffin, 2016). “These awards added to our legitimacy,” stated Odums. Shortly after the success of *New Orleans for Sale*, the collective was offered an opportunity with a local ABC affiliate in the South, ABC 26 WGNO, and for the first time were even paid for their work. 2-Cent Entertainment was given a 30-minute slot at midnight on Saturdays and produced ten episodes. For the first two shows, they updated their original “Perception of the Black Man” and “How Does Hip Hop Affect Your Community” episodes and made them more relevant to post-Katrina New Orleans. They also
produced two episodes about the overhaul of the New Orleans public school system\textsuperscript{77} after the storm, interviewing their friends and peers who were affected. Several of the episodes showcased their hip-hop and comedy sketches (Odums, 2016; Richard, 2016).

\textit{Project N.O.! and Listen: Literacy & Arts Festival}

Aside from bottom-up journalism and creative musical productions, 2-Cent Entertainment also tried to organize for place in different ways. As previously discussed, the \textit{Freedomland} premiere aimed to bring people together in one physical space to help incite action around various issues. Project N.O.! was a vision that the collective had, but were never able to pursue due to funding challenges. Nik Richard explained the idea through poetry in their Project N.O.!\textsuperscript{78} video from June 2\textsuperscript{nd} 2008:

\begin{quote}
I am standing in the Ninth Ward where the levees broke...
So picture this...erecting a stage here for one day only –
a musical event like you’ve never seen.
In front of that stage, thousands of young people would open their ears. And on that stage, a platform. For who? Us! The future of New Orleans...young artists, rappers, poets, activists, anybody with something to say to all give us the opportunity to come together and cry out the same message that we've been screaming for years now.
And what is it N-O...NO!
\end{quote}

In the video, N.O. stood for New Orleans, it stood for “no other” referring to the uniqueness of the city, it stood for “new occupations” and “new opportunities” and it stood for “not open” in reference to businesses and schools that remained closed. N.O.! also meant “No” to various policies and redevelopment plans. 2-Cent members yelled No! in front of closed public school buildings, they yelled No! in front of public housing slated for demolition, and No! in front of commercial development that erased local businesses that were there before the storm. Since 2-Cent Entertainment never officially applied for or received 501(c)(3) status, it was difficult for the group to raise funds.

They had a fiscal agent, the Youthsansia Foundation, which was founded in 1997 as a youth development and arts organization. The founder, Kimberly Dilosa, used to run a teen center on the West Bank, and both Griffin and Odums would spend time there in high school and college, respectively. Even with Youthsansia Foundation as a fiscal sponsor, it was still difficult and complicated to raise money for Project N.O. ! (Odums, 2016; Griffin, 2016; Richard, 2016). “We didn’t always worry about money, and made art because we wanted to, but 2-Cent was supposed to eventually operate like a business,” said Odums. The group re-published the video in 2009, in hopes of organizing the event for Katrina’s 5-Year anniversary, but funding remained a challenge.

\textsuperscript{77} After Katrina, the New Orleans public school system into a city-wide choice voucher charter school system, with very mixed effects on communities of color.
\textsuperscript{78} Project N.O.!: \url{https://www.youtube.com/watch?v=VQljizQsJ7k} (Accessed: 2017)
While Project N.O.! never launched, Listen Fest\textsuperscript{79} was a successful event that 2-Cent Entertainment conceptualized and organized several years after the storm in which they gave away 20,000 books that Scholastic donated to the collective.\textsuperscript{80} One of the 2-Cent members had a contact at Scholastic, and was able to broker the donation. The group organized the event annually in 2011, 2012, and 2013. It took place at the Community Book Center on Bayou Road, a historic gathering place for Black New Orleanians. Approximately 50 volunteers have staffed the event each year, of which half came from 2-Cent members’ personal connections and the other half learned about 2-Cent through YouTube or social media (Griffin, 2016). 2-Cent also asked for donations via social media (Twitter and Facebook) and collected money for the events this way too.

While the event was not directly related to Katrina, it was addressing social issues such as access to education that were further exaggerated by the storm. Manda B. explained once 2-Cent started running workshops inside New Orleans schools for youth (which I further elaborate on in the next section), that members of the collective saw firsthand how terrible literacy rates were in middle school and high school among African-Americans. In fact, this inspired 2-Cent to make a comedy video called “Every Book in the World,”\textsuperscript{81} to promote reading among young people, which was a spoof of Lil Wayne’s popular hip-hop song “Every Girl in the World.” The 2-Cent spoof song has approximately 184,000 views on YouTube and was even criticized on Tom Joyner’s morning radio show in 2011, who opined that it was inappropriate to encourage young people to read via hip-hop because of offensive lyrics.\textsuperscript{82}

2-Cent was excited to be mentioned on such an influential radio show, but they were angry and hurt by the sentiment. The incident showed 2-Cent members that they had actually collected a loyal following on social media, who were standing up for the group digitally by emailing and tweeting at Tom Joyner. Odums remembered, “By the power and the people who support us, we were able to combat him and get him to not only change what he said about us, but speak about us in a positive way and support us.” In response, Tom Joyner apologized to 2-Cent, invited Odums on the show, and promised him a check for the group to continue doing their work. This fueled 2-Cent to keep working towards social change on the outlets and platforms that they thought were best.

Manda B. continued, “People sacrifice in this group...we don’t get paid to do this. We do it because we know there is a need. We started researching the statistics and learned that the state government uses fourth grade reading levels to determine the number of prison beds that they’re going to build. Once we started learning these kind of statistics, we thought we need to be proactive and not reactive. New Orleans is festival heavy, so we thought, we’re going to make a festival that’s actually meaningful...and it was very successful.” In true New Orleans style, the event had live musical performances, brass bands, food, and free books. Joyner’s check helped fund the event in 2011.

\textsuperscript{79} Listen Fest is short for Listen: Literacy & Arts Festival
\textsuperscript{80} I was not able to an abundance of information about the types of books donates, but they ranges in all topics and reading levels.
\textsuperscript{81} 2-Cent’s Every Book: \url{https://www.youtube.com/watch?v=0HbTlRz9ZQ} (Accessed: 2017)
\textsuperscript{82} Tom Joyner is an African-American host of the nationally syndicated The Tom Joyner Morning Show and the founder of BlackAmericaWeb.com.
Approximately one thousand people attended each Listen Fest in 2011, 2012, and 2013, maybe more according to Odums, Griffin, and Manda B.


Source: 2-Cent Entertainment

2-Cent also used events such as Listen Fest (and other premieres, gatherings, or parties) as a place to sell their brand. Several members of the collective and their friends were local designers and entrepreneurs that sold graphic t-shirt or hats. Over the years, 2-Cent’s logo has gone through various transformations because of these talents. In most 2-Cent videos, the individuals on screen are wearing these self-designed items. This was another way in which the group hoped to make their collective a business.

Image 4.5 2-Cent Entertainment Logos

Source: 2-Cent Entertainment
From “Edutainment” to Youth Mentoring

After 2-Cent produced Freedomland and collaborated with the PHRF in 2007 and 2008, various teachers from public schools started inviting the members to present their work and train students in media production. Odums said, “We basically didn’t say no to any challenge, and so that added to our list of things that we were doing. When teachers would ask us to do a class, our response was, ‘Yes. We haven’t done it before, but hey, why not?’” As more and more invitations to teach media skills and media literacy inundated 2-Cent, they began changing the focus of the collective from “edutainment” production to “edutainment” for classroom learning (Odums, 2016).

At first, 2-Cent members appeared in various New Orleans public school classrooms as guest lecturers. Then in 2009, they formed a partnership with the Lafayette Academy Charter School and hosted several mini workshops throughout the year. Often the collective would also produce videos of their workshops for their YouTube page. And then in 2011, 2-Cent started running summer programs, which were funded by NOLA Youth Works Job1, a youth employment program within the City of New Orleans. According to the NOLA Youth Works website:

[The organization] will provide quality summer experiences that builds a pipeline to careers for local Youth ages 13-21. Experiences will focus on creating a career-ready workforce. As such, our programs are intended to have a long-lasting and long-term impact on each participant. Youth will earn a much needed paycheck and, equally as important, gain experience that help them define, and advance their career goals (NOLA Youth Works).

The City was not only paying students who participated in the program, but also the 2-Cent instructors. As mentioned in Part 1 of the dissertation, Louisiana’s Motion Picture Investor Tax Credit provides film productions up to a 30% transferrable credit on total qualified in-state production expenditures, including resident and non-resident labor. This attracted many film crews to the state and New Orleans after Katrina. NOLA Youth Works saw this as an opportunity to prepare their young constituents for new jobs.
that would emerge in the state’s growing creative industry, and therefore were excited to fund 2-Cent Entertainment to run summer sessions (Griffin, 2016).

The members who are still active with the collective and mentor young people across New Orleans assert that this is the most impactful work of the group. Griffin shared, “It's success for us when young people run up to us, and say, ‘Man, I remember y'all came and spoke to us, to my seventh grade class, and I remember that. I'm into film now’ or ‘I'm doing this.’” For Manda B., working with young New Orleanians has been the most meaningful component of 2-Cent since she helped start it in 2004. She teaches her students to always question the images they see on television and the Internet, and think about how these images influence the way one sees themselves.

Manda B. realized through teaching media production and media literacy, that her students, many of whom were just children between the ages of 5 to 10 during Katrina, were still dealing with trauma from the disaster. She explained,

*These kids saw dead bodies with their own eyes. That's not a natural state of being, and there were no psychologists. No one went to therapy after Katrina. This is something that these kids have to deal with on their own, and still have to deal with. They didn't go and talk about these images that they saw, but we helped them process it... That was a big thing that we wanted to do through media...*
Odums, Manda B., and Griffin discussed how they try to understand people’s thoughts and feelings before encouraging individuals to make media. They have various strategies to do this, including letter writing and small group conversations. Showing their own (2-Cent’s) work, especially the videos inspired by Katrina, such as *Freedomland*, helps the teenagers and young adults in the room open up, and reflect on their Katrina experiences too, even several years later. Manda B. always asks and tells her students at the beginning of a workshop or summer session, “What is important to you? Now, we're going to make a film about it, and we're going to make sure everyone sees it.” In 2015, the theme of the summer session final projects was the tenth anniversary of Katrina, which are all posted on 2-Cent's YouTube page.

Aside from creative expression and amplifying voice, 2-Cent instructors have been excited about the possibility of their workshops and summer sessions preparing the city’s young people for jobs on movie sets that have arrived in New Orleans via Louisiana’s Motion Picture Investor Tax Credit. “When we started, we were the same age as some of our students, and we really struggled with earning money from our work. It’s not what motivated us to speak up, but it would have been nice to have gotten paid for it,” said Griffin. Manda B. pointed out that 2-Cent has never been a full-time occupation for any of the members because no one could earn a steady income from it. Nevertheless, the members do not see a tension between creative expression, speaking up, and earning an income. “We did it all, and we want to teach and mentor our students to do the same. It doesn’t matter how much money you have, you can still make a difference with your two cents,” said Odums.

At the beginning of their summer sessions, 2-Cent instructors always ask their students, “How many of you are interested in film and video?” According to Odums, usually only three people out of twenty in the class raise their hands, and then by the end, almost everyone leaves the programs saying, “I want to continue with media.” 2-Cent does not formally track if their workshop participants go on to get jobs in the field, but receive enough anecdotal evidence from students to know their workshops do increase self-confidence and self-awareness. 2-Cent instructors connect with many of their students via social media (Facebook, Instagram, Twitter), and see how after summer sessions, their posts become more political. People start posting photos or videos about policies or places in New Orleans that need improvement (Odums, 2016).

Given that mostly everyone who participates in NOLA Youth Works Job1 program is a low to middle income minority in the city, I asked Odums, Griffin, and Manda B. whether their students had access to the appropriate technologies for media production or if the digital divide affected their teaching. They each reflected about how from 2005 to 2016, access to tech tools had changed dramatically (see Methodology section for more information on this). When they began 2-Cent, they were borrowing equipment from NOATV and University of New Orleans. Slowly, each member acquired their own cameras, laptops, and software as they became more affordable and as 2-Cent members became earning adults and found different types of employment. When they began teaching in 2009, they would bring equipment for students to borrow, but by 2012, every student always had a smartphone. Manda B. said, “Once being able to view videos on your phone became more and more prevalent, it was definitely a positive effect for us.”
Odums added, “While everyone has a smartphone these days, they may not understand its power, and that’s where 2-Cent comes in...” While participants of 2-Cent workshops knew how to use Instagram, Facebook, Twitter, and YouTube, they did not know that they could use those platforms to incite social change (Odums, 2016). The divide is not so much in access as it is in usage (Graves, 2016). Odums believes that “young black people find themselves using these devices in ways that end up harming them...or exposing them...or getting them in trouble because they don’t really understand the power that it has...” This goes back to 2-Cent’s initial mission, which was using the tech tools and platforms to share their two cents. Those two cents can then lead to important activities including resource-sharing, bottom-up journalism, organizing for place, memorialization, and even economic self-determination. The collective matured from “making content that would change the world” to “creating more content makers so there are minority points of view being represented in the public sphere” (Odums, 2016).

The Future of 2-Cent Entertainment

As of 2016, 2-Cent stopped offering summer sessions through the NOLA Youth Works program. This is mainly because Brandan Odums, the leader of 2-Cent Entertainment, debuted his first solo graffiti show inside a 35,000 square-foot warehouse named #StudioBe in the Bywater neighborhood of New Orleans. Odums needed to direct his attentions to his art, and toured across the country for speaking engagements throughout that year. 2-Cent Entertainment never had a dedicated staff or space to operate out of, and the flexible group adapted to projects and external conditions as needed. They borrowed each other’s equipment and worked in each other’s homes and schools. For this reason, various members are involved in the collective at different times, and as the founders grow older, their creation, production, and teaching happens randomly. When I met Griffin and Manda B. in 2016, 2-Cent did not have any ongoing or upcoming projects. However, neither individual said this meant the work of the group was complete. They were both certain that future ventures would emerge. All the active and inactive members are on a group chat and keep in constant touch with one another (Harrell, 2016).

According to Odums, 2-Cent is most known for its involvement with younger generations and fortifying the black community in New Orleans through digital media production (Odums, 2016). Odums and Manda B. hope to open a media arts school in New Orleans so the younger generations of minority New Orleanians have a place to be creative and learn how to tell their stories through technology all year round (Odums, 2016; Manda B., 2916). While I was in New Orleans meeting and interviewing 2-Cent members, I spent a lot of time in the #studiobe warehouse. While the inside of the building walls was showcasing Odums’ work, I noticed how it also functioned as a physical anchor for 2-Cent. Members of the collective always felt welcome at the #studiobe space even when it was not open to the public. Former students would drop by to say hello and some would even hang out there. 2-Cent was built upon

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83 In 2013, Odums created a series of graffiti murals depicting iconic African American civil rights leaders at the abandoned and damaged Florida Avenue public housing complex in New Orleans’ Lower Ninth Ward, which he titled #ProjectBe. He received national attention for his art and people came to see the graffiti from all over the world before the structures were demolished. In 2014, Odums created #ExhibitBe, with similar graffiti across an abandoned five-story apartment building in the West Bank. Salvaged works from both of these projects as well as new pieces are featured in #StudioBe.
interpersonal relationships, and through the process of creating media via technology and using social media to share these productions, these relationships not only grew stronger, but multiplied. Unintentionally, the #studiobe building allowed those relationships to flourish and sustain in physical space. While 2-Cent was dormant in 2016, their YouTube page and the #studiobe warehouse continued to exhibit their legacy.

Image 4.7 #studiobe Warehouse in the Bywater (left) and #studiobe Exhibit (right)

Source: the Author (both images)

The exhibit on the right shows Trayvon Martin, Oscar Grant, Eric Garner, and Michael Brown holding the same “I am a Man” signs that the Memphis sanitation workers carried alongside Martin Luther King Jr. during 1968 civil rights protests. The slogan is a precursor to today’s #blacklivesmatter phrase.
Revisiting the Research Questions

“It doesn’t matter what the technology is, our missions stays the same. Harness the tools to tell your story and figure out how to capitalize off of it.” – Manda B.

Figure 4.1 Evolution of 2-Cent Media

Circling back to Part 2 of the dissertation, Figure 4.1 uses the categories from the Post-Disaster Community Media Typology in chapter 3 to show the evolution of 2-Cent Entertainment’s purposes. Before Katrina, the group came together to produce a television show about the black experience in New Orleans. They referred to their approach as “edutainment” – using sketch comedy, hip-hop, and rap to educate viewers about various ideas and realities. Additionally, the initial goal among members of the collective was to figure out how to operate 2-Cent like a business as evidenced their LLC status, which they obtained six months after their formation in 2005.

After Katrina, 2-Cent reconvened in Atlanta, but shifted their mission to expose stories from their perspective about the storm using tech platforms such as YouTube, MySpace, Twitter, and Facebook. Producing videos such as *Freedomland* was therapeutic for those involved and also a form of memorialization. As of 2017, the songs and images exist on the Internet showing how a certain community felt post-Katrina. 2-Cent also partnered with the People’s Hurricane Relief Fund to pursue bottom-up journalism. All these activities led to various in-person events and gatherings, “fortifying the Black community” as Odums put it.

Lastly, while economic self-determination always was and still remains a goal for 2-Cent, the group never figured out how to make the collective a full-time livelihood for any member. They did eventually receive financial support from the NOLA Youth Works Job1 program, which aimed to train younger generations in media production for future employment. One avenue that 2-Cent did pursue to...
capitalize off of their media creations, was to partner with local entrepreneurs in their personal networks to produce and sell 2-Cent-branded paraphernalia at events and parties, participating in a hyperlocal niche economy.

Table 4.1 *Outcomes of Community Media*

<table>
<thead>
<tr>
<th>GAINS</th>
<th>Individual</th>
<th>Collective</th>
<th>Urban</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Recognition</strong></td>
<td>Therapy and support; Self-awareness</td>
<td>Processing collective trauma; group identity assertion</td>
<td>Disruption of dominant narrative as evidenced in news outlets and public dialogue</td>
</tr>
<tr>
<td><strong>Instrumental Capacity</strong></td>
<td>Sense of empowerment; self-efficacy</td>
<td>Stronger social ties; formation of new collectives/communities; collective efficacy</td>
<td>Expanding knowledge bases by diversifying sources; Fusion of expert + local knowledge in policy making/creation of physical plans</td>
</tr>
<tr>
<td><strong>Asset Creation</strong></td>
<td>Acquisition of media production + media literacy skills; employment; job readiness</td>
<td>Acquisition of public and private resources and assistance; neighborhood-run communication infrastructures</td>
<td>Public investments; Inclusive policy and plans; Economic development and workforce training programs</td>
</tr>
</tbody>
</table>

Since 2-Cent Entertainment has been a flexible collective since its founding, the members never put together a formal rubric for evaluating success or the impacts of their work. Friends would join and collaborate when possible, and projects ranged from YouTube webisodes to music videos to festivals as well as teaching and mentoring. When the collective was more focused on creating their own content, they never paid attention to analytics or views (Richard, 2016). Of course, 2-Cent producers were excited when a YouTube video went viral, but there were pieces that only got a few hundred clicks that the artists were prouder of than the productions that were popular.
The in-person events such as the *Freedomland* premiere or Listen Fest\(^8^4\), were the most instant, visual representation of how many people the group reached. “When we would host an event that we advertised through social media, a lot of people, several hundred to a thousand, beyond our friends would show up, and we thought ‘Oh, all these people are here because of us,’” said Richard. Table 4.2, which is based on Table 4.1 highlights the individual, community, and urban gains that emerged from 2-Cent community media.

Table 4.2 *Outcomes of 2-Cent Community Media*

<table>
<thead>
<tr>
<th>GAINS</th>
<th>Individual</th>
<th>Collective</th>
<th>Urban</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recognition</td>
<td>The process of creating post-Katrina content helped 2-Cent members and future students process their own trauma.</td>
<td>The process of creating post-Katrina content helped the group embrace their identity as young Black New Orleanians with a shared experience and unique point of view.</td>
<td>Images and lyrics from music videos such as <em>Freedomland</em> provided an authentic view into post-Katrina NOLA that mainstream media could not access or communicate. <em>New Orleans for Sale</em> won several awards from national organizations bringing attention to the Black experience post-Katrina.</td>
</tr>
<tr>
<td>Instrumental Capacity</td>
<td>2-Cent members realized they had agency and pursued various individual goals.</td>
<td>Social ties within the 2-Cent collective itself became stronger. The group undertook various endeavors together such as Project N.O.! Social media facilitated a larger network of weak ties.</td>
<td>The group shed light on issues such as disaster tourism in the Lower Ninth Ward and the Red Cross’s Means to Recovery Program in New Orleans.</td>
</tr>
<tr>
<td>Asset Creation</td>
<td>Young adults who participate in 2-Cent’s workshops and summer programs gain media</td>
<td>2-Cent business activities provided income for young minority entrepreneurs. 2-Cent was able to raise funds for</td>
<td>Events such Listen Fest were open to any resident of the city. NOLA Youth Works Job1 program provided young adults with summer incomes.</td>
</tr>
</tbody>
</table>

\(^{84}\) 2-Cent hosted several other entertainment events around rap and hip-hop that were not discussed in this dissertation.
Every single 2-Cent member that I spoke with, expressed how being part of 2-Cent and finding creative ways to speak out about life post-Katrina was critical as they processed their own trauma. The collective was an outlet to explore one’s emotions and process them with one another through media production. Nik Richard and Stephen Harrell Jr. felt that making YouTube videos about the issues they were facing post-Katrina was not enough to spur change, and this motivated both of them to return to school at the University of New Orleans to study urban planning so they could influence policies. Harrell said, “We were so young, we weren’t exactly paying attention to politics at that age so we weren’t as strategic about how our voices could make a difference.” Jon Devin Carrere, who only collaborated with the group in 2009, said that 2-Cent inspired him to become a journalist. He wanted to help other people who didn’t have access to media platforms be heard. Now when he looks back at his involvement with 2-Cent, he realizes the group was an example of true information innovation.

Since 2-Cent was neither an official non-profit organization nor a flourishing business, their initiatives, such as Project N.O.I did not always receive attention from funders or local government. However, the collective is a unique social enterprise, and an example of true civic engagement and organizing that foundations and policy officials should support. The members struggled with amplifying their voice while also earning an income, and these two activities needn’t be at odds with one another.
Chapter 5
Red Hook WIFI: From Mesh Networking to Social Networking

CHAPTER SUMMARY

Red Hook WIFI was officially founded in 2011, approximately a year before Superstorm Sandy hit New York City and left the isolated neighborhood flooded and severely damaged. After the storm, it was one of the only functioning communication infrastructures in the area. This chapter describes the history of the digital network and how it transformed from two talking routers to an entire workforce development program for young adults, The Red Hook Digital Stewards (DS). It discusses how low-income, minority young adults in Red Hook built a mesh network in their community, and analyzes the impacts of this activity on the young adults themselves, the neighborhood, as well as greater New York City. The chapter also presents the results of a Participatory Action Research survey project co-designed and administered by Digital Stewards and the author in 2016 to better understand the perception and usage of Red Hook WIFI in the community. Finally, it concludes by using this case to shed light on the initial research questions: did Red Hook WIFI and the digital stewards program lead to new forms of social relations and civic engagement in the digital era? What are the benefits of Red Hook WIFI and the digital stewards program, and at what scales (individual, group, city-wide) do these gains manifest?

Introduction

“The ambition of the community wireless project is both modest and huge. On one hand, it can be seen as an effort to get volunteers and small local businesses to work together to put small bits of technology on rooftops and maintain them. On the other hand, it means creating a network that is able to physically and socially bridge divides, whether caused by socioeconomics or a natural disaster.” (Berwick, Next City, 2016).

Control of the media is also about control of communication infrastructure (Byrum, 2016). Red Hook WIFI is different from many of the examples that I described in the typology because it is an infrastructure that enables the production and sharing of various types of media. Red Hook WIFI and other mesh networks aim to be a physical manifestation of democratic principles. For example, many routers talk to one another in order to provide access to the Internet as opposed to the common model of one central access point through a large national Internet Service Provider (ISP). It is locally owned and managed, and difficult to regulate or monitor because only aggregate data passes through local servers. Usually, all network traffic from the mesh to the Internet is encrypted. In other words, it is a different form of media governance (Berwick, 2017; Centelles, Oncins, and Nuemann, 2015).

Josh Breitbart, the Senior Advisor for Broadband at the Office of the Mayor, reminds neighborhoods such as Red Hook, that “providing broadband [to low-income residents], in and of itself, provides very limited benefit.” He explained, “If you’re not somebody who has economic privilege and you go online, mostly what you see is a world designed by and for people who have that privilege. As you bring those communities online, they bring their relationships online, and they
should be able to bring their stories and voices and depictions of their own community onto the Internet” (Personal Interview with Josh Breitbart, 2016). This is how infrastructure such as Red Hook WIFI can facilitate the production of community media.

The story of Internet access, communications infrastructure, and Red Hook WIFI appeared in several well-known national publications and niche blogs after Superstorm Sandy. Provocative headlines appeared in newspapers and magazines, as well as soundbites in radio shows introducing the neighborhood’s novel and resilient technology. Such titles included:

*A Tech Innovation in Red Hook’s Housing Projects:*
*Thanks in part to a community wireless network, low-income residents in Brooklyn are creating new forms of networking in the digital age* (*Colorlines*, 2013)


Many of these media pieces presented a specific narrative about Red Hook WIFI – one in which young people of color from Red Hook public housing invented and built an infrastructure that assisted friends, neighbors, and residents in their community during a critical time of need. This portrayal is popular because the underdogs are the heroes improving their neighborhoods, and everyone benefits from their hard work. A 2014 *New York Times* article opens with this description:

Robert Smith, a 19-year-old in a gray T-shirt and camouflage pants, climbed the stairwell of the Joseph Miccio Community Center in Red Hook, scaled a ladder at the top floor and jumped onto the roof. He soon found what he was looking for: bright, white plastic boxes, each about the size of a brick, some with little antennas sticking out. Mr. Smith pulled a laptop from his backpack and got to work, tending to the nodes of the Red Hook mesh, an ambitious plan to link up a local wireless digital network across the neighborhood (Cohen, 2014).

Before Superstorm Sandy, Red Hook barely received media attention in mainstream press such as the *New York Times*, and when it did, the stories were negative portrayals of the public housing (Personal Interview with Anna Ortega-Williams, 2016). When I interviewed Robert Smith about his experience as a Digital Steward and his thoughts about all the media attention that he and his neighborhood received, he told me, “Mainly after Hurricane Sandy, I started to see Red Hook mentioned in a lot of newspapers, and mentioned by the mayor and all of that stuff. But prior to that, nothing I can really think of...” Similarly, Alden Parkinson, a Red Hook public housing resident and a former Digital Steward who also worked as an assistant for the Red Hook DS upon graduation from the program stated, “People outside Red Hook could tell me more stuff, more information [about Red Hook and Red Hook WIFI] that I didn’t even know because of all the news articles out there.” Anna Ortega-Williams, Director of Training and Evaluation at RHI and an employee of the organization for
approximately fifteen years discussed how all the media attention facilitated a “bounce-back” in the neighborhood:

From Sandy happening, that put us on the map in a really big way. Bigger than I’ve ever seen Red Hook on the map for anything else... Then, from there, just building the network right after that, and building a platform where people communicate after they got hit by this crazy storm, I think that brought a lot of attention here because it’s like, what a bounce-back, and that positive attention facilitated even more bounce-back.

Ortega-Williams elaborated that residents of Red Hook felt stronger after Sandy because they were able to help themselves and innovate solutions to their own problems. The initial media attention legitimated community members’ efforts, furthering this innovation. This narrative was clear in several news stories, and reinforced strength and agency within the community. For example, a 2013 article in Colorlines reads:

What the project in Red Hook adds is an understated emphasis on racial equity – having people own the networks that they rely on and use them to solve problems unique to their communities (King, 2013).

Maya Wiley, former Counsel to Mayor Bill de Blasio, advises him on legal matters involving City Hall and the executive staff, and also provides guidance to the Mayor on the legal aspects of policy and administrative matters. Before she worked for the mayor, she wrote an essay in The Nation describing how young people in the neighborhood were using and benefitting from Red Hook WIFI:

Tyquan Carter is a rapper and lifelong Red Hook resident and community advocate. He is young, he is black, and the Internet gave him a voice and job opportunities. He made a short film about the storm called ‘Tyquan’s Hook: a True Storm Story’, for which he also wrote the script and music (Wiley, 2014).

When Mayor de Blasio read Maya Wiley’s 2014 article in The Nation about Tyquan Carter and Red Hook WIFI, he offered Wiley a position as his Counsel. He also tasked her with creating a citywide Broadband strategy modeled after RHI’s Red Hook WIFI vision and the Digital Stewards program. Wiley’s essay about the importance of free Broadband in low-income communities such as Red Hook inspired the Mayor to commit $10 million to deliver free Internet to residents of the Mott Haven Houses in the Bronx, the Queensbridge North and Queensbridge South Houses in Queens, as well as the Red Hook East and Red Hook West Houses in Brooklyn. Through the RISE (Resiliency Innovations for a Stronger Economy) competition, the New York City Economic Development Corporation (NYC

85 Maya Wiley resigned from this position in July 2016.
EDC) has funded Resilient Communities NYC, a program of New America, to teach six different community-based organizations in East Harlem, Hunt’s Point, Sheep Head’s Bay, Gowanus, Far Rockaway, and Staten Island how to build local WIFI networks and expand the RHI Digital Stewards program to their neighborhoods.

These stories also brought a lot of attention to the Red Hook Initiative, helping the non-profit organization garner resources and donations from around the country for their work, specifically around WIFI and the Digital Stewards program. Tony Schloss, the Director of Technology at RHI stated, “After Sandy, everything changed. Our reputation totally changed.” Donors appeared out of the woodwork and the group achieved a strong reputation among the philanthropic community too. Also through RISE, the agency has funded RHI to expand Red Hook WIFI throughout the neighborhood by recruiting more small businesses to host routers (Schloss, 2016). There was even some tension within the non-profit regarding the WIFI program’s eminence outside Red Hook. Alyx Baldwin, one of the original founders of Red Hook WIFI explained, “The thing about the Red Hook Initiative is that they actually do a lot of things. It's not fair that one program got much more exposure than the other programs” (Personal Interview with Alyx Baldwin, 2016).

While media coverage about Red Hook WIFI has undoubtedly benefitted the organization and other public housing residents in New York City in some ways, those from the neighborhood and those who actually lived through the creation of Red Hook WIFI, Superstorm Sandy, and the building of the Digital Stewards program, know that journalists often take shortcuts with the true narrative (Personal Interviews with Tony Schloss, 2016; Alyx Baldwin, 2016; Anna Ortega-Williams, 2016). Tony Schloss shared his perspective:

The media stories are a little out of proportion to what’s happening on the ground too...The realities are a little bit different. I guess the idea is slightly innovative and so people like to write about that and that’s good, but when you’re here on the ground, you’re still struggling with the systemic inequities that people are facing in this neighborhood, which can make it really hard.

Schloss is referring to the fact that the young adults who built the network and those who subsequently joined the Digital Stewards program “may not have high school degrees or may not be able to afford phones to communicate with others or may need to take their mothers to the hospital instead of showing up for work to build the WIFI network.” Schloss is not sure if this is the story he wants told anyhow, but it is clear that outside media portrayals can overlook people's realities (Schloss, 2016; Ortega-Williams, 2016). Anna Ortega-Williams reflected about recent violence in the community over the past five years post-Sandy. Those tragedies in Red Hook were barely covered by any news outlets. “When certain people's realities get omitted, that hurts the neighborhood in some ways in terms of the allocation of resources” (Ortega-Williams, 2016).
The purpose of this case-study is to present an un-sanitized account (to the best of my ability) of Red Hook WIFI’s founding, the creation of the Digital Stewards program, and other media and civic technology activities that occurred within the neighborhood post-Sandy. What did the external news stories about Red Hook WIFI miss and how do these external narratives and internal realities contribute to community resilience, if at all? I spent a total of four months in Red Hook, Brooklyn (June, July, August 2016; January 2017) working at the Red Hook Initiative. I interviewed key informants, conducted ethnographic participant observation, program evaluations, and was an instructor in the Digital Stewards program. I also collaborated with eight young adults who were in the program to co-design and manage a participatory action survey about Red Hook WIFI. (See Chapter 2 about methodology for details).

How It Started

“It’s a very complicated story and it’s been written about many times in the past...it’s completely wrong every time.” – Alyx Baldwin

While local communication infrastructures such as Red Hook WIFI are seen as an important aspect of disaster recovery and resilience, this was not the network’s initial purpose in the neighborhood. Tony Schloss, the Director of Technology at the Red Hook Initiative (and also a skilled audio engineer) and Alyx Baldwin, a former Parsons graduate student, founded the network in 2011 to host an Internet radio station.

In 2009, Schloss started RHI Radio, a pirate radio station based inside his Red Hook home. A pirate station refers to an unlicensed broadcast of FM radio, AM radio, or shortwave signals over a wide range, and are illegal in the United States. According to the Federal Communications Commission (FCC), the operation of these unlicensed broadcast stations can cause interference to other licensed broadcasters, non-broadcast services, and may even endanger public safety. Schloss did try to get an official license from the FCC for a low-powered FM station, but the agency was not issuing any new ones at that time in New York City. Section 301 of the Communications Act prohibits the “use or operation of any apparatus for the transmission of energy or communication signals by radio without a license issued by the Federal Communications Commission.”

Individuals or groups found operating radio stations without FCC authorization are subject to a variety of punishments including “seizure of equipment, imposition of monetary forfeitures, ineligibility to hold any FCC license, and even criminal penalties.” Willing to take this risk, Schloss’ pirate station broadcasted programming by young people in Red Hook, who produced digital stories and wrote rap together. An initial mission statement from 2010 about RHI Radio reads:

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88 Ibid
We are Red Hook Radio, a youth produced radio station. Our mission is to create change by reflecting the Red Hook community voice. Through this program, we give young adults the opportunity to express their ideas and opinions based on influences, challenges and experiences they face in their communities. We are determined to inform the Red Hook community and all other communities from the perspectives of young adults about issues we all face in our neighborhoods. With this motivation, we plan to educate by sharing our knowledge through training and by providing a vehicle for communication.

Alexander Coles, a lifelong resident of Red Hook, was one of the first members of the radio program. He got involved with RHI in 2007 when he turned fifteen and his mother told him that he needed to get a summer job. He began as a tree planter when the mayor had an initiative to sow one million trees throughout New York City and claimed during our interview that he singlehandedly planted fifty trees in Red Hook. While he was proud of this achievement, Coles wanted to enhance his communication skills as he prepared his college applications. The following summer he joined Schloss’ radio program, which taught him how to interview, ask questions, and create an audio story. He described how the program helped him use technology to be a producer rather than a consumer (Coles, 2016). Coles elaborated:

What we got out of it was so much more. It was a big inspiration; there’s a world outside of Red Hook. We went on a lot of trips, we met a lot of people. It taught you how to think on your feet. There was one time we had to go to Manhattan. They were like, ‘Go get an interview’ We were like, ‘What? ’Just go. We taught you everything, go do it.’

Coles was part of the radio program for two years before he left for college. He made a radio piece after Obama’s election that made everyone he knew in Red Hook cry. 89 “I mastered it, did everything, got the interviews...and I was able to share with the world or whoever was listening – what it meant to me to see a Black man become president.”

Before Schloss built the pirate radio station in his home, participants in the youth program would publish their creations via the Internet on a website or content sharing system. “The distribution was a problem. I felt like we made these things and they just went off into nowhere. It was like one of the billion, trillion sites out there at that point. And there was no connection with people who were listening to our stuff,” explained Schloss. This lack of local connection with listeners is what inspired Schloss to construct the pirate radio station that he hoped would be easily accessible to residents and workers in the neighborhood. Yet, he worried that RHI would get into trouble because of the station’s illegality and in the process of brainstorming alternatives, contacted the Open Technology Institute (OTI), a program of the policy think tank, New America. Josh Breitbart, a former Senior Research Fellow at OTI and now the Mayor’s Special Advisor on Broadband, advised Schloss to build a neighborhood mesh network that could then host an Internet radio station.

89 The radio piece is no longer available on the Internet.
Localized wireless networks can be traced back to the 1970s, when the University of Hawaii researchers built ALOHANet, connecting computers across the Hawaiian Islands that could transmit data to one another before the invention of the Internet. In a “mesh,” instead of relying on a central network, users wirelessly transmit information across a set of routers whose connections are chained together. Mesh networks are powered by dynamic connections between nodes, and the only way to shut down the network is to turn off every single node in that network (the network would also shut down if only one node was operating).

Mesh networks also connect to the Internet if one of the routers, known as “the Gateway,” can access it through a third-party Internet Service Provider (ISP). For years, independent mesh networks have been used in places like Berlin, Athens, and Barcelona to expand Internet access across neighborhoods that lack it, but they have also gained attention for their usefulness in more extreme circumstances such as protests and natural disasters when ISPs are banned or not functioning. Various mesh networks have been deployed to build independent communication networks during protests such as Occupy Wall Street or Hong Kong’s Occupy Central (Meinrath, 2015; Centelles et al, 2015).

A mesh network in Red Hook would make it possible for the young people to broadcast their productions on an Internet-based radio station, hopefully engaging more local residents than a website, and enabling RHI to share its resources and opportunities beyond its physical walls. OTI provided a curriculum, equipment, and technical support as well as ran preliminary trainings with Schoss, and then eventually RHI young adults on building and maintaining mesh networks. This was all inspired by New America’s (OTI is part of New America) long-term partnership with Detroit’s Allied Media Projects and its Detroit Community Technology Project (DCTP) that developed a Digital Stewardship pedagogy and curriculum in 2009 (Personal Interview with Diana Nucera, 2016). DCTP develops technology rooted in local, on the ground needs, that strengthens human connection, and aims to demystify how media and technology work for residents. DCTP also aims to understand local communication technology’s role in restoring the economy through mutual aid and authentic relationships. They have implemented mesh networks in seven Detroit neighborhoods, training over 25 neighborhood leaders (Nucera, 2016).

Most importantly, Breitbart introduced Schloss to Alyx Baldwin, then a graduate student in the Master in Design Technology program at Parsons whose thesis project investigated the social incentives behind wireless mesh networks. Baldwin was in search of a community that wanted to build a mesh network in order to test ideas for research. Red Hook was the perfect place because of its strong independent neighborhood culture. Baldwin stated:

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90 Allied Media Projects is based in Detroit, Michigan and supports models of using media (broadly defined as all forms of communication, from videos and websites to theater, dance, design, and interactive technology) for social justice and transformation.

They were very supportive of the idea because they wanted to build something for their own neighborhood...because there’s a lot of feelings of being disconnected from Brooklyn. Red Hook has always been a little bit, like, ‘We can do things on our own.’ ‘We can have our own sovereignty.’ ...but at the same time a lot of people I’d talk to in Red Hook are like, ‘We don’t feel any community,’ because everything is so fractured (Personal Interview with Alxy Baldwin, 2016).

Baldwin was describing the very noticeable culture in Red Hook. Since the neighborhood is surrounded by water on three sides, and the Brooklyn-Queens Expressway on another edge (refer to methodology section for more details about Red Hook), the physical isolation creates an autonomous village-like environment with many local businesses providing resident needs.

Beyond the radio station, Schloss was excited about the potential of this digital network to connect residents who did not know one another. Internally, Red Hook is divided between those who live in “the front” (where the public housing known as the Red Hook Houses are located) and those who live in “the back” (where private market housing near the Pier is located).
Figure 5.3 Red Hook: “the Front” and “the Back”

Images on the left show businesses and waterfront apartments in “the back” and images on the right show the Red Hook Houses in “the front.”

The residents of these two sections did not interact with one another much until after Superstorm Sandy (these phenomena are discussed in more detail in the following section). In Red Hook, residents in “the front” and in “the back” primarily get their information by word of mouth or face to face (PAR Survey, 2016). Alden Parkinson, a Red hook public housing resident and former Digital Steward said, “Honestly, before the Red Hook Initiative, my friends and I didn’t really know what was going on. And outside the housing projects, I really didn’t even know” (Personal Interview with Alden Parkinson, 2016).

In terms of the digital world, Facebook was and still is the most popular platform among RHI youth (Digital Stewards Focus Group, 2016). Since hanging flyers on New York City Housing Authority (NYCHA) property is prohibited, it can be difficult to spread information throughout “the front” of the
neighborhood. Flyering is a popular technique in “the back” of the neighborhood because of the various coffee shop bulletin boards. Schloss explained:

> It’s really hard to get information to people who might need it, and there’s been no central place for local communication. There are neighborhood services available to residents that not everybody takes advantage of, and people need help with things like finding jobs, getting their benefits, or responding to court orders. This network can help people figure out those processes. There are also two sides to the neighborhood: the public housing and the middle-class homeowners. The hope is that the network is a virtual space where everyone meets together.

Several staff members at RHI echoed the above sentiment. For example, social worker Meghan Ryan said, “It’s just always been a challenge for us to get the word out about things and the resources that we have at RHI. We thought, a wifi network that gave you updates on a login splash page could be a very easy way to expand our work beyond our walls.” Anna Ortega-Williams stated, “Let’s get right down to the basic point, which is people don’t have the resources that they should have and others do. The mesh network would address digital divide; it would address lack of stability.” Many of the residents who live in the Red Hook Houses have phones, but run out of data and run out of minutes due to affordability. In fact, during Fall 2011, when Schloss and Baldwin set up the first up Ubiquiti public wifi routers inside and outside the RHI building, many young people came and sat outside to access Internet with their mobile devices, even when the office was closed (Ortega-Williams, 2016).

When residents or RHI visitors connected to the wireless access point, then called “Red Hook Initiative WIFI,” they were directed to a splash page on a local server. The splash page welcomed the user on to Red Hook WIFI, shared updates and local news, and included a “Shout Box” which was a local digital message board allowing everyone to leave a comment or a note. A couple dozen individuals contributed to Shout Box, indicating that not many people used the application. The comments were not of much consequence and were “very random, forms of cursing, and complaints about the service” (Baldwin, 2017). Carrying out the vision of establishing an inclusive and informative digital space for the entire neighborhood would require much more work and organizing (Schloss, 2016; Baldwin, 2016).

It was very difficult for Schloss and Baldwin to receive permission from building owners to install routers on their roofs, which made increasing the geographic breadth of the mesh network challenging. For best performance, routers should be positioned at the same height or line of site, within half a mile of each other (Schloss, 2016). They asked several businesses both in “the front” and “the back” of the neighborhood if they would be interested in hosting a router on their building roof, but no one agreed. Some local businesses were already paying for Internet, and were not interested in joining the community experiment. Others worried that free Internet inside their business would attract loiterers. Small business owners also did not want to take on the liability of people installing
hardware on their roof. In general, these stakeholders saw participating as a nuisance rather than a benefit (Schloss, 2016; Baldwin, 2016).

NYCHA did not allow anyone outside the agency to install, hang, or mount anything on any part of the buildings. Schloss and some of the youth radio producers reached out to NYCHA employees to get support for the mesh network vision, but there was little traction. The request stalled at the desk of a lower level employee and no permission was ever given to install routers on the roofs of Red Hook Houses. Josh Breitbart, the Senior Advisor for Broadband at the Office of the Mayor, made sense of the challenge: “If you have a single government landlord for that entire area, the way you get permission for [installing a router on the roof] is through a political bureaucratic process, versus the rest of the neighborhood, the way you get access to other properties is through relationship-building and community organizing.” He further explained that the City would not only need to look into security, but also insurance and other affiliated costs (Breitbart, 2016). Perhaps the best way for Schloss and the Digital Stewards to get permission from NYCHA to access the roof would be by building the network throughout the neighborhood and showing strong community support for it as well as the WIFI’s success (Breitbart, 2016).

Thus, in March 2012, Schloss and Baldwin installed an additional router on the roof of a non-NYCHA apartment building (the former Monarch furniture factory, see Figure 5.4) on Verona Street overlooking Coffey Park, the most popular public space in the neighborhood. While some of the young adults in the Radio program were present when Baldwin and Schloss installed routers in different places, and assisted with the task, there was not a consistent group of young people involved in these activities. Schloss said, “There may have been one or two who were around a little bit, but deep youth involvement didn’t begin until we started Digital Stewards, which happened after Sandy, during the recovery period.”

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92 As mentioned in the introduction, eventually, three years later in 2015, Schloss made contact with the Head of Information Technologies at NYCHA and was able to negotiate permissions to install routers on NYCHA properties. A few months later, the Mayor announced that the City would provide free Broadband to all public housing development beginning with five developments including the Red Hook Houses (East and West), Queensbridge (North and South), and the Mott Houses in the Bronx. At this time, Schloss and the Digital Stewards program stopped working on building the network across the Red Hook Houses themselves.

93 Schloss’ friend allowed them to access the roof. This is described in further detail later in the chapter.
At this time, RHI WIFI used OTI’s Commotion Wireless firmware running on Ubiquiti routers, which operate off of building electricity or battery power. Commotion is a free and open-source communications tool that uses mobile devices and computers to create decentralized mesh networks. The community can decide where and how the network should grow. Commotion networks are resilient to outages because they are sustainable on battery power, and can distribute access to applications hosted on local servers or on the routers themselves even when all power is lost (Open Technology Institute, 2013).

For their\textsuperscript{94} MFA thesis, Baldwin wanted residents of Red Hook to take ownership of the mesh network that they and Tony were constructing. The hope was that this would occur through the creation of applications on the network that were helpful and meaningful to residents’ lives. The base program running off Commotion was Tidepools, which Baldwin developed for piloting on the RHI mesh network. It was an open-source customizable local mapping platform. Local communication, place-making, data collection, and organizing were all possible on Tidepools. Baldwin described the program as follows:

\begin{quote}
It’s all based on that map, which is a community’s own representation of events. From that perspective, that was something that was really interesting. In terms of the technology, you can actually have ownership over that content. You can basically change the way that content is projected by your neighborhood.
\end{quote}

\textsuperscript{94} Alyx Baldwin’s preferred gender pronoun is they/their.
For approximately seven months, Baldwin and Schloss held collaborative design workshops with Red Hook residents of all ages to determine which types of applications would be most useful. Baldwin identified various themes that emerged through the workshops:

- Lack of access to the Internet (at home and through a mobile device)
- Lack of access to resources (employment and trainings)
- Need for a local information system
- Need for accountable community participation (electronic bulletin boards, spaces for frequently asked questions)
- Need for the applications to be multilingual (Spanish, Arabic, Tagalog)
- Police harassment in the neighborhood

(Baldwin, 2012)

After the initial tests of the local network, Baldwin and Schloss dedicated their energy to launching three applications off the Tidepools platform. These included:

1) Where’s the B61 Bus? launched on October 9, 2012:
   This application accessed real-time bus locations and arrival times using data from the Metropolitan Transit Authority’s BusTime API.

2) Stop & Frisk Survey launched on October 17, 2012
   A survey application that residents could use to document police interactions in Red Hook.

3) RHI Radio, which was never launched
   The initial purpose of the network was for this online radio station.

(Baldwin, 2012)

Just two to three weeks after these applications were unveiled, Superstorm Sandy devastated low-lying Red Hook. “So we were experimenting with the network and Tidepools. We had two routers at RHI and one next to Coffey Park. That's about where we were when Sandy happened,” Schloss said when I asked him how developed the mesh network was before the storm.

Red Hook WIFI During the Storm

*When we first built Red Hook WIFI, I didn't even know that there was going to be a disaster in Red Hook. It was randomly proven later on that it actually worked.* - Alyx Baldwin

Amid power outages and flooding due to Sandy, the need for communication systems in Red Hook was critical. Several residents stated that Columbia to Van Brunt Street did not have power (Digital Stewards Focus Group, 2016; Schloss, 2016). The RHI building along with the Coffey Park apartment building on Verona Street were two of the few locations that managed to keep power during the storm because flooding did not occur around those structures. Schloss explained, “These buildings just happened to have power. I don’t know why the Coffey Park building didn’t lose power because my house a half a block away did. RHI did not because the water did not reach the building,
and that building didn’t have a basement so it could not be flooded.” Thus, RHI WIFI was still functioning.

Image 5.2 Flooding in “the Front”  Image 5.3 Flooding in “the Back”

Source: The Red Hook Initiative (Both Images)

Baldwin and Schloss found that in the days immediately following the storm, more than 300 people per day were accessing the network to communicate with loved ones and to seek recovery assistance, whereas pre-Sandy, approximately 30 people had been logging on to the network each day. Several residents reported that text messaging was the most widely used means of communication for neighborhood residents. Therefore, Baldwin developed RHI Status, an SMS Plugin for Tidepools (see Figure 5.5), which provided a means for residents to text their location and needs to a contact number, which automatically mapped the information in Tidepools with threaded discussion so others on the mesh network could respond. The application worked wherever Red Hook WIFI was accessible.

Figure 5.5 RHI Status Application

Source: Open Technology Institute
Officials from the Federal Emergency Management Agency (FEMA) did not appear in Red Hook for two weeks after Superstorm Sandy (Schloss, 2016; Ortega-Williams, 2016; Digital Steward Focus Group, 2016). Most members of RHI were disappointed with FEMA’s aid. Staff member Frances Medina articulated it well: “They were late. We already had a smooth sailing way of doing things, and then they came in and literally just dropped shit off and left” (Medina, 2016).

When they did come, FEMA arrived with their own team of hackers, and were not aware that a mesh network already existed in the neighborhood. At first, FEMA workers thought that the best way to assist Red Hook residents was to address their physical and social isolation by building communication infrastructure. When Frank Sanborn, a FEMA Innovation Fellow learned about RHI WIFI, he recruited volunteers from NYC Mesh, a community-owned network in the city and HackDC, an organization in DC devoted to collaboration in the creative use of technology. He coordinated these groups with the International Technology Disaster Resource Center (ITDRC) to expand and strengthen RHI WIFI.

With guidance from OTI and community involvement from members of RHI, a large team set up a FEMA satellite link on the roof of Red Hook Initiative and installed a Commotion router on the roof of an auto body shop a block away from the non-profit. Notably, before the storm, the owner of the auto body shop had been reluctant to host a router on his roof. Like many other small business owners, he was concerned about its safety and did not see any benefit to him or his business by participating in the mesh network experiment. However, after the storm, he was more than accommodating and quickly agreed to host a router. A Red Hook resident and RHI employee stated:

Right after the hurricane hit, then everyone was willing to come together as a community and we were allowed to put the node on top of the garage of that place that apparently said, ‘No’ before. We were able to basically link together all of those nodes very fast, very quickly. The neighborhood came together and everyone was like, ‘Oh sure, you can put a node on top of this thing.’ There was a feeling of community immediately afterward (Personal Interview, 2016).

Similarly, Ortega-Williams who has been working at RHI since 2004 also reflected on the phenomena of people coming together in Red Hook post-Sandy:

It has a cultural significance now in terms of the threading of the neighborhood and there were really powerful moments that hadn't happened before in the same way. Where neighbors who lived in private houses were relying on the volunteer support of youth who were living in public housing and vice versa. Where folks who lived in private residences were able to bring candles or batteries so there was a real “leveling of” through the damage. Everyone was hit with the damage. People wanted to help each other across the neighborhood, just like people wanted to survive that moment. But then you’d still see inequality, like people who could afford the heater versus people waiting in line to get one.
The auto body shop, which was just one block or about 200 feet away from RHI, became a key link between the Internet gateway at RHI, and the router overlooking Coffey Park. This is because its roof was in the same line of sight as the apartment building roof overlooking Coffey Park. The mesh network could distribute the Internet connection to locations where residents, first responders, and recovery volunteers needed it most. Electricity and running water were still unavailable in most of Red Hook throughout November 2012 and the need for communication infrastructure continued to grow. Brooklyn Fiber, a local ISP, volunteered an additional gateway to RHI WIFI. To add the gateway into the mesh, OTI, RHI and Brooklyn Fiber installed a 5 GHz Ubiquiti Nanostation Loco router on the 3rd floor of the Visitation Church Rectory on west side of Coffey Park. Previously, the church was also not interested in participating in the mesh experiment, but were open and optimistic about its potential post-Sandy. Even though the church was also without power at the time, the router was connected to a battery that enabled it to run 12 hours at a time.

Figure 5.6 Locations of RHI Routers post-Sandy

Most people whom I spoke to in Red Hook that lived through Superstorm Sandy told me that RHI WIFI was tremendously helpful for them to carry out their personal business, contact loved ones outside of the neighborhood, as well as check e-mail, texts, the news, and social media accounts. Schloss worked with RHI staff to create digital postings with information about Red Hook each day for months after Sandy on the splash page. However, it is unclear how many people paid attention to this information. While the mesh network was certainly successful in providing people with a messaging system, and later the Internet, it had not yet grown into the local communication system that Schloss and Baldwin envisioned.
The Red Hook Digital Stewards

The Early Years

In chapter 3, I discussed the success of Frances Medina’s tweeting on behalf of the Red Hook Initiative post-Sandy (see pages 71-72). Her twitter fundraising gave Schloss the resources to create the Red Hook Digital Stewards program as a way to expand Red Hook WIFI. In the program, Red Hook youth would learn about digital networking and build out Red Hook WIFI while earning an income.

Katherine Ortiz grew up in Red Hook public housing and has been involved with RHI since she was 11 years old for approximately fifteen years. She started as a peer health educator, teaching other adolescents in the neighborhood about reproductive health. Ortiz also experienced Superstorm Sandy firsthand. She explained, “I literally watched the whole neighborhood go up in water. I live on the 14th floor [of a NYCHA tower] so I watched all the water coming in from my window.” Like many of her neighbors, she volunteered at RHI, which became an emergency hub for the community after the storm. She helped arrange beds for those who were displaced, assisted individuals with paperwork, as well as organized and distributed the plethora of donations that kept coming to RHI. During this time, Ortiz did not really know about Red Hook WIFI. She was aware that some “test communication system” that Schloss built pre-Sandy was working after the storm, but she was not using it personally. Her cell phone had spotty service and, because most of her loved ones were in Red Hook within walking distance, connectivity was not critical for her. The only person she needed to communicate with from afar was her son’s father who lived elsewhere in Brooklyn, and her spotty cell service worked for that (Ortiz, 2016).

Like many of her neighbors, Ortiz was overwhelmed by the number of outsiders that entered her community to help with Sandy relief. Her friend and a Red Hook resident described the scene: “I saw at RHI, there were tons and tons and tons of bikes that were just parked across the street and they were all volunteers. We had all these volunteers from different places in NYC that just all came to this one place to help give out as much things as they could.” As described in Part 1, the majority of these volunteers came from Occupy Sandy. Ortiz stopped volunteering at RHI after just one week. She explained, “Eventually, I stopped going just because it was a ton of volunteers that weren’t even from the neighborhood trying to take over everything, and I was just fed up.” Nonetheless, she was still touched by the way people in her neighborhood came together post-Sandy.

When Ortiz was looking for a part-time job a few months after Sandy, her mother suggested she become an RHI Social Justice Fellow. These fellows were a group of young adults (mostly from the Red Hook Houses) organizing around issues in the neighborhood, such as public housing rights and police harassment. Ortiz’s mother, an employee of RHI, was leading and managing the group. Shortly after Sandy in early 2013, when Ortiz arrived at RHI to sign up for Social Justice Fellows, she learned about the launch of the Digital Stewards program. As a teenager, she was an active user of MySpace and did not want the same generic page that everyone else had, so she taught herself HTML CSS in order to design a personal page on the Internet that reflected her. When she learned about
the Digital Stewards program that day, it brought her back to the fun she had with MySpace. She told her mother, “I want the Digital Stewards job...I don’t need you to be my boss at work.” And that’s how Ortiz became one of the very first Red Hook Digital Stewards.

Alexander Coles, one of the members of RHI Radio reflected about the creation of the Digital Stewards: “Really the radio program [was] the original Digital Stewards. We were the only tech program around and then it evolved over time.” Nigel Taylor, Anthony Evans, Tiwan Burras, and Catherine Ortiz were all the very first digital stewards referred to as “Generation 1”.

A couple of months later, Robert Smith and Larry Fishburne joined the program. Robert Smith, another lifelong Red Hook resident, had just graduated from high school in 2013 and was looking for work in June before he went to college. His intention was to study veterinary sciences and animal behavior, but he wanted to save some money before he did so. “I showed up open-minded and willing to learn whatever it was, and just gain skills,” said Smith.

The first cohort of Digital Stewards, also known as Generation 1, was a group of six neighborhood residents. Every day was different for these young adults, who spent most of their time initially scoping out roofs in the area that would be a good place to install a node. They worked 4 to 6 hours a day. Smith shared, “We were always trying to figure out what we had to do every day. In the beginning, when we started, the program was just getting off its feet. There was no clear structure on how we were to go about learning things.”

Schloss, Baldwin, and visiting staff members from the Open Technology Institute (OTI) explained the philosophy of the mesh network to these participants and how it was useful after Sandy. Ortiz remembered:

The reason why anybody was excited about it was that if one node did go down, there was still access, because they were able to route around that node that went down. That’s what made it super cool. No matter which one went down, it would still find a way to fix itself and still give access, with or without Internet.

To that end, Smith recalled, “The way that I saw it in the beginning was we’re building a platform so that residents in the community can communicate with each other.” The group wanted to figure out how to add to the strong sense of “community” that emerged post-Sandy through the network. They asked themselves, “How can we make it so it’s not only used for when a disaster happens, but it can be used on a daily basis to bring the community together? How can we “mesh” populations together and get all the businesses in this area to hire people from the actual community and bring them closer so it doesn’t feel so segregated from one another?” (Catherine Ortiz, 2016; Robert Smith, 2016; Alden Parkinson 2016; Alexander Coles; 2016; Larry Fishburne, 2016).

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95 Each cohort of is referred to by their Generation number in the DS lineage.
I asked all of the former and current Digital Stewards that I interviewed, “How is using Red Hook WIFI for the purposes you are describing – community-building, communication, local hiring, and information-sharing – different from the way you use the regular Internet?” Everyone explained to me that after looking at the 2013 census data on broadband and housing, they learned that more than 50% of the residents in the Red Hook Houses did not have Internet access. Smith answered, “With providing a platform to communicate, we are also providing Internet access to a community that doesn’t have it.” Parkinson from Generation 2 explained, “Some people need to apply for job interviews [or] need to fill out applications and stuff like that online and they can’t even do that because they can’t afford Internet in their home or nothing.” Similarly, Fishburne shared, “Basically, the mesh network was also a tool to help people who didn't have knowledge about Internet. They didn't really know how it works and we told them.”

The Digital Stewards learned how to use OTI’s Commotion software, and then worked on elevator pitches that described to Red Hook business owners why building a wireless mesh network would be a good idea for the neighborhood, convincing these stakeholders to host them. It became much easier to do this after the storm since stronger social ties among community members formed and proliferated through the process of rebuilding and recovery. Homeowners and business owners from “the back” had developed trust with public housing renters and business owners from “the front.”

One digital steward described how young people from Red Hook public housing helped clean and gut stores in “the back” that were more catered for the white homeowners. He had never even been inside some of these spaces until after the storm. Smith reflected, “My experience with Sandy was surreal. Actually, I won’t even focus on the sad parts of it. To me, it was surreal because I’ve never seen so many people in the neighborhood come together so well.” However, on the other hand, while she acknowledged that everyone was friendlier towards one another, Ortiz didn’t believe that she actually formed new relationships. And while it was a little bit easier to approach business owners, the Digital Stewards received permission to install routers in places where the owner or organization had an existing relationship with RHI or Schloss personally (this is explained in greater detail in following subsection “The First Network”).

Most of the early-cohort Digital Stewards I spoke with stated that climbing to the top of these roofs for router installation was their favorite part of the experience. Ortiz laughed, “We had a lot of near-death experiences climbing buildings and walking around, making sure the routers across the neighborhood could see each other in order to go from point to point and for them to work.” She, along with other Generation 1 Stewards, claimed that constructing this network by hand was their single biggest success in the program. Though not everyone found installing routers on roofs so exciting. Parkinson from Generation 2 said, “It’s kind of boring, I’m not going to lie. You go on a roof, you got to learn how to maneuver around a computer, it’s really boring. You got to memorize, your memory game has to be up, for real.”
This Red Hook WIFI map portrays the expansion of the network from 2013 to 2015. As described earlier in the chapter, Schloss and Baldwin’s first experiment was on top of a small building in the park that stored maintenance materials (known as a park house, and was not part of the New York City Department of Parks and Recreation). Schloss and Baldwin received informal permission to install a router on the roof from someone who had keys for the building and helped maintain the park. The router remained there for only a couple of weeks before it moved alongside the park to the roof of the apartment building on Verona Street that was once a Monarch luggage factory. Schloss had a friend who lived in this building, and so he was able to access the roof through the personal contact. Because this roof was higher than the top of the park house, the router worked more effectively (Schloss, 2016).
Soon after Sandy, Brooklyn Fiber, a local Internet Service Provider (ISP) increased the bandwidth of this router so the network was accessible to more people. Schloss’ friend and contact moved out of the Monarch luggage factory, and RHI no longer had access to the building. The router was then moved to the Joseph P. Addabbo Health Center on Richards Street, where it is still located today. Employees of the health center and employees of RHI knew one another well so this was a natural home for the router.

Figure 5.8 Red Hook WIFI Network (as of 2016)

Generation 1 Digital Steward Tiwan Burras installed the router at Addabbo Health Center. In fact, the Generation 1 Digital Stewards installed routers at: the Red Hook Art Project (this one only lasted a year until 2014), the Red Hook East/Joseph Miccio Community Center on W. 9th Street, Volunteers at Sullivan and Van Brunt; Clinton Street, and Visitation Church. The Generation 2 Digital Stewards installed routers on Bay Street, at Bumblebee Daycare on Lorraine Street, Dikeman Street, Ferris Street, Tea Park, the Red Hook Library, AV Farm (this one only lasted a year until 2014), and Pioneer Works. These Digital Stewards were able to install routers and build a mesh network between 2013 and 2014 because of the relationships that Schloss or RHI had with individuals and organizations throughout the neighborhood.

For example, local non-profits such as the Miccio Community Center, the Red Hook Art Project, and Pioneer Works did not have Internet access pre/post-Sandy and were all strong allies with the Red Hook Initiative. The Bay Street building was owned by the landlord of RHI, and therefore

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96 In fact, Brooklyn Fiber and Schloss scheduled a meeting the day after Sandy to figure out how to spread free Internet access across the neighborhood.
allowed a Digital Steward to install a router on its roof. Tony’s personal relationships not only facilitated the installation of the router on the roof of Coffey Park apartment building on Verona Street, but also the installation of the router on Richards Street.

Katherine Ortiz, Tiwan Burras, and Robert Smith were the only members from the first cohort that learned how to maintain the routers so whenever one went down, they would arrive on the scene to fix them even after they graduated from the Digital Stewards program. Ortiz recalled:

> I picked it up relatively quickly and everyone was like ‘Oh, well...Kathy knows how to do it. Go to the router at Bumblebee [childcare center], it went down. Go see what’s wrong.’ I would go and I would try my hardest to figure out what was wrong. If I didn’t know, my last resort was to call OTI, but it would take an hour with them if I couldn’t figure it out myself.

In its first year of operation between 2013-2014, the Red Hook WIFI network was not reliable. Routers in the mesh would randomly stop working and users around the neighborhood would complain to RHI employees about its functionality. Due to extensive media coverage, many visitors wanted to learn about, see, as well as use the network, which at times would just not allow people to access the Internet (Smith, 2016). Smith stated, “Red Hook residents were trying to use it and then people were [also] coming to Red Hook to learn about it, and it was really embarrassing and horrible when it didn’t work.”

Since there were not enough trained Digital Stewards to maintain the nodes and keep them running on a constant basis, RHI hired Robert Smith as a system administrator in July 2014 after he graduated from the Digital Stewards program. At the time, Smith was also interning with Brooklyn Fiber (the local ISP) and served as a program assistant for DS. He was the Red Hook WIFI system administrator until March 2016, and while in the role, he ended up rebuilding the network in the neighborhood and navigating it to new software (Smith, 2016).

The original Commotion software was too problematic, and its developers in Washington D.C. were difficult to contact whenever there were issues. Schloss and Smith decided to move the Red Hook WIFI routers onto UniFi at the recommendation of Brooklyn Fiber. While Commotion was a mesh system, UniFi was a point to point system. Wireless mesh technology allows the routers to connect to one another through a multi-hop path, which allows information to travel router to router. Point to point wireless technology dedicates one strong hub as the main gateway to which all the other routers connect. This type of network has increased reception and less complicated troubleshooting than the mesh network, but may be more vulnerable if the main gateway goes down or loses power. (Meinrath, 2005; Schloss, 2016).
Smith had to take each router flashed with Commotion, reset them, and reinstall new operating systems to run off UniFi. Then a UniFi image was installed on the router so that it could connect to the main Unifi controller. After switching from Commotion (mesh) to UniFi (point-to-point), Smith saw the usage of Red Hook WIFI increase dramatically (Smith, 2016). When operating on Commotion, the network received approximately 500 logons a year (the software did not track unique users), which was very low. However, when operating on UniFi, the network received approximately 500 logons per week. Even though laborious, Smith was proud of his work. He said in reference to the network he rebuilt, “Witnessing that growth, I knew without a doubt that I was doing my share in trying to close that communication gap in the neighborhood.” By the end of 2016, 3,000 unique users connected to Red Hook WIFI 15,624 times via UniFi (Red Hook Initiative, 2016).

Smith also shared how happy he was when he provided the Miccio Community Center with Red Hook WIFI when reconfiguring the network. When the network operated as a mesh on Commotion, service was always down in the Miccio, but once the network switched to UniFi, Miccio’s fifteen public computers had reliable Internet access (Smith, 2016). “This benefitted a lot of people, mostly NYCA residents, who relied on the Miccio,” explained Smith. He reflected on the experience: “I feel the best way to learn about technology is to actually use it. You can read a book on it, but you don’t really understand it until you actually start to use it.”

Both Smith and Ortiz beam with pride when they describe their roles in building Red Hook WIFI, but they also both wish that the network was able to host more of the applications that they brainstormed with Baldwin, pre-Sandy. As of 2017, they both still lived in Red Hook and were applying the skills they acquired as Digital Stewards in tech jobs. Smith is a Support Technician Intern
at Google and Ortiz is a Program Associate at New America in the Resilient Networks Communities NYC Program\textsuperscript{97} at New America, which is training five community-based organizations to start and manage mesh networks as well as Digital Steward programs.

Smith credits the Digital Stewards program for providing him with exposure to ideas and careers that he would not have considered otherwise (Smith, 2016). Ortiz’s visions for the various networks across New York City remain the same as the one she had when she was a Red Hook Digital Steward. Having experienced the challenges with Red Hook WIFI’s functionality firsthand, she emphasizes how important it is for the non-profits to have the social and economic capacity to keep these networks running and sustainable in the long-term (Ortiz, 2016). “I’m kind of worried [about Red Hook WIFI]. Who maintains it? Who will maintain it?,” asked Ortiz with concern during one of our interviews.

By the end of Generation 2 (2014), the two cohorts of Digital Stewards built and upgraded the Red Hook WIFI network with approximately fifteen routers throughout the neighborhood. However, future generations of the Digital Stewards did not focus on building out or expanding the network. “The network was in place and we were promised money from NYCHA [the New York City Housing Authority] and the NYCEDC [The New York City Economic Development Corporation] for expansion so we were holding out on that funding,” explained Schloss.

In 2014, the New York City Economic Development Corporation (NYCEDC) launched the Resiliency Innovations for a Stronger Economy (RISE) competition “to identify and deploy creative new technologies and solutions to make New York City businesses more resilient to the impacts of future storms, sea level rise, and other effects of climate change” (RISE: NYC Competition Brief).\textsuperscript{98} The competition was being administered by NYCEDC on behalf of the City of New York allocating funds from the Department of Housing and Urban Development. Through RISE, EDC aimed to fund “innovative projects that would make buildings and infrastructure networks in areas impacted by Hurricane Sandy and/or vulnerable to future storms better able to resist, adapt to, or bounce back from extreme weather events” (RISE: NYC Competition Brief).

In April 2015, the Red Hook Digital Stewards were awarded a RISE grant to expand Red Hook WIFI by collaborating with the neighborhood’s small businesses. Through a partnership with Sky Packets, a wireless network installation and maintenance company that installed free Internet in Bryant Park, the Red Hook Digital Stewards would mount and maintain 70 access points throughout the neighborhood, covering 80% of the commercial areas in the neighborhood. While the RISE grant

\textsuperscript{97} Resilient Communities NYC will be discussed in greater depth in the upcoming section.

\textsuperscript{98} As part of the Federal recovery and rebuilding process, New York City has to date been allocated $3.2 bullion in Federal Community Development Block Grant – Disaster Recovery (CDBG-DR) funds from the U.S. Department of Housing and Urban Development (HUD). Up to $30 million of the City’s CDBG-DR allocation was distributed through RISE.
would fund the cost of equipment, Internet bandwidth, design, and installation, the Red Hook Initiative would continue to support Digital Steward salaries (Schloss, 2016).

Given that there was an expectation for the RISE grant since 2014, future cohorts of the program did not focus on building out and expanding Red Hook WIFI. Instead, the Red Hook Digital Stewards program curriculum grew, and participants learned various tech skills from IT support, graphic design, social media, and video production. Red Hook WIFI was no longer a central focus (Smith, 2016; Schloss, 2016; Bussey, 2016).

**Digital Boot Camp**

In 2013, members of the Generation 2 Digital Stewards program (and every other DS cohort thereafter) participated in a one-month long Digital Bootcamp organized by local non-profits including Dance Theatre Etc. (DTE), the Red Hook Initiative, South Brooklyn Community High School, and Good Shepherd Services. DTE brings together artists and residents to co-create cultural activities in Red Hook. Good Shepherd Services provides programming and guidance for low-income youth and their families across New York City (with one of their locations in Red Hook). This Boot Camp provides Red Hook teenagers and young adults with 80 hours of rigorous instruction in video editing and production over the course of one month each summer (dtetc.org). Approximately 30 students attend each year (of which 5 to 10 are Digital Stewards) and are paid for their participation.

During the last two weeks of Boot Camp, small groups of students are expected to produce 3 to 5 minute videos about a Red Hook business of their choice. Businesses can then use the videos for their own promotional activities. With respect to Red Hook WIFI, when users log on to the network they arrive at a splash page that informs them about local events, businesses, and news. Schloss’ vision is that the videos rotate as features on the splash page so Red Hook visitors and residents can learn about new and existing enterprises in the neighborhood.

Boot camp students are responsible for exploring the neighborhood, recruiting the business, conducting interviews and filming content for the piece, as well as editing the video. This requires the young adults, usually from “the front” of Red Hook to approach and form relationships with small business owners in “the back” of the neighborhood. Jaebi Bussey, an instructor for both the Red Hook Digital Stewards program and Boot Camp since 2014 described how this process fosters new relationships throughout the neighborhood, and “builds upon the strong sense of community that emerged post-Sandy” in Red Hook (Personal Interview with Jaebi Bussey, 2016). Common sentiments from students during the small business recruitment process include:

I didn't even know that [business] was there.
I didn't even know this store did that.

99 Along with the Digital Stewards, other young adults from the area participate in the Digital Boot Camp.

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I didn’t think those people would be as cool as they are…
I didn’t think I could just walk into this place where no one looks
the way I look and get something out of that exchange (Bussey, 2016).

The shorts are premiered each summer at the Cobble Hill movie theater, about 1.6 miles away
in a nearby upper-income neighborhood. Usually, the business owners who are subjects of the work
attend the screening. The event ends with a question and answer session with the young filmmakers
and audience members. At the 2016 showing, an audience member asked the filmmakers, “What did
you learn about your neighborhood from this experience?” The Digital Boot Camp participants began
to explain how appreciative they were of businesses that they once thought were “stealing away their
neighborhood.” For example, two of the shorts were about the gelato shop, Dolce Brooklyn and a
high-end men’s clothing store, Wooden Sleepers, respectively. Both businesses are located on Van
Brunt Street, Red Hook’s main commercial corridor, and opened in 2016.

![Figure 5.9 Van Brunt Street Commercial Corridor](image)

More often than not, long-time Red Hook residents, especially those from the Red Hook
Houses, see such establishments as gentrifying the neighborhood, and serving an upper-middle class
clientele (Bussey, 2016; Schloss, 2016; Ortega-Williams, 2016). However, after the Digital Stewards
were welcomed into the shops by the business owners, and used video to learn about the stories
behind these stores, the young adults expressed an excitement for the businesses’ presence in the
neighborhood. In response to the question at the Cobble Hill theater screening, one Digital Steward
said, “I didn’t even know what gelato was, and now I think every neighborhood needs to have gelato.”
Another expressed his desire to open a men’s clothing store similar to Wooden Sleepers, and referred
to the owner of the shop as “my boy.”
Similarly, the various participating business owners were delighted to work with the Digital Stewards, and see the collaboration as essential for weaving “the front” and “the back” of the neighborhood together. This relationship building continues to foster the cross cultural social ties that emerged during Sandy, and is also very useful for the future expansion of Red Hook WIFI. “Once the RISE grant comes through and the Digital Stewards begin installing more routers, it will be easier for them to facilitate trust with shopkeepers who already know them and the program through Boot Camp,” said Bussey.

The majority of Digital Stewards state that Boot Camp is their favorite part of the entire program in their DS graduation evaluations and focus groups (Ortega-Williams, 2016). “I felt like with video I could really express myself,” stated Alden Parkinson of Generation 2. Parkinson did not know anything about filmmaking before he became a Digital Steward, and learned he had an inherent talent and joy for the craft during Boot Camp. He leveraged the experience to become a freelance video producer and works with several organizations in the neighborhood, including the Red Hook Initiative, and other organizations across New York City to create media on commission. He uses RHI’s equipment to complete these various projects and build his portfolio. Parkinson said, “…once I got a chance to do other things [during the DS program], I’m like, “I’m done with Wifi. I’m not trying to go back there no more. I could probably give you a pitch or something for Wifi, but that’s about it. I just want to make movies now.”

Digital Boot Camp shows how the process of filmmaking and the shared goal of creating a piece that both parties valued, allowed two sets of strangers to become friends. Nonetheless, while filmmaking has helped weave “the front” and “the back” together more, Van Brunt Street is still a rapidly gentrifying commercial corridor, with more and more stores only serving the needs and preferences of those who live in “the back.” As one Digital Steward mentioned, “Even though I am cool with some of the shopkeepers on Van Brunt Street, I still don’t like hanging out there because people are mostly white and unwelcoming, and there’s not much around for me.” Is there a way to use the final Boot Camp assignment so that participants continue building relationships with business owners, while also showcasing their own concerns about commercial activity in the neighborhood?

**From Mesh Networking to Career Building**

As discussed, it was the Generation 1 Digital Stewards that built Red Hook WIFI with some support and assistance from Generation 2 participants. By the third generation, the Red Hook Digital Stewards program focus was no longer about resilient communication infrastructures and free local Internet. Once Generation 1 completed the program, Red Hook Digital Stewards even relocated to their own workspace in the neighborhood on Ferris Street in the “back” of the neighborhood along the water near other industrial buildings. The DS space is in the basement of large brick former

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100 Attilli and Sandercock (2010; 2014) also demonstrate document a similar phenomenon that occurred during the making of a film about divisions between indigenous people and ancestors of settlers in Canada.
factory structure, and houses two computer labs with about 15 computers, a dozen laptops, various wires, gadgets, and open desk space. The walls are covered in press about the Red Hook Digital Stewards and motivational posters with sayings such as “Opportunities don’t happen. You create them” and #blacklivesmatter.

Figure 5.10 Digital Steward Ferris Street Work Space
Image 5.5 Ferris Street outside and inside (Right)

Jaebi Bussey, the technology trainer and curriculum writer, joined the Digital Stewards program in April 2014 when the Generation 2 trainees were starting. Bussey manages the growth of the program as well as how the young adults learn through it. “…When I came on, [RHI leadership] wanted to formalize what the learning was…” said Bussey. He was tasked with articulating which skills and what knowledge Digital Stewards would acquire from the technology program. He reflected a lot about his own relationship with technology to do this:

In my life, technology has been my number one tool of empowerment; the number one way I've been able to improve my situation. Whether it’s learning something, getting money, finding resources to find money, it’s technology. In this day and age, what a lot of people and especially young people are not as connected to, although they are living with the technology, is how much power they have in their hands to make a difference, to be heard, to be seen, and to make change.

Before Bussey came to Red Hook and started working at RHI, he believed that the digital divide no longer existed. However, he observed a “flabbergasting” paradox in Red Hook. Many of the young adult Digital Stewards did not know how to use e-mail, but those same young adults were owners of smartphones. Bussey attributes this to cultural capital, explaining that e-mail was not an
important mode of communication in the lives, families, and communities of Red Hook youth. However, because e-mail was the established mode of communication in the professional world, he felt strongly that these were basic skills that the program should cover. “Probably every young adult from the Red Hook Houses knows how to use their smartphone to actively engage with Facebook or Snapchat, but is only that going to help them in the future?,” asked Bussey.

Since Bussey is not from Red Hook and did not experience Superstorm Sandy in the same way as many of his RHI colleagues and students, he felt removed from the development story of Red Hook WIFI, as well as the disaster preparedness angle of the network and technology in general (Bussey, 2016). He said, “…technology learning wasn’t necessarily and still isn’t around disaster preparedness. In a disaster, absolutely, you can have [technology] as a backup to communicate. But even in non-disaster times, it’s a way for you to get a leg up, to get ahead of the curve, and to change your entire situation.”

Similarly, Alexander Coles (who participated in Red Hook Radio, the impetus for Red Hook WIFI), returned to the neighborhood two years after Superstorm Sandy when he graduated from college in South Carolina with degrees in Communications and Graphic Design. Schloss hired Coles to be the Design Instructor for the Digital Stewards in 2015. As Coles developed his teaching plan, he felt detached from the Red Hook WIFI creation story too. Other than using Red Hook WIFI to access social media and websites critical in his lesson plans, the creation story of the network seems irrelevant for Coles’ teaching (Coles, 2016). Under his training, participants learn how to use Adobe software such as PhotoShop and Illustrator to design movie posters, logos, and even Snapchat filters. With Bussey and Coles on board, The Red Hook Digital Stewards program transformed into a structured workforce training program with three specific levels by Generation 3.

Level 1 introduces students to the basics of computer networking and prepares them for careers in IT support. Level 2 includes Digital Boot Camp and a Coles’ design module. Level 3 is focused on professional development in which participants create a resume and write a cover letter for a role they want within Red Hook Digital Stewards such as “IT Specialist”, “Social Media Manager” or “Designer.” Schloss, Bussey, and Coles then assign projects that benefit the Red Hook Initiative, other neighborhood organizations, or the DS program internally to the Digital Stewards in Level 3 (Schloss, 2016; Bussey, 2016; Coles, 2016). After completing the program, which takes approximately 8 months, Schloss and Bussey help the new graduates obtain short-term internships with organizations such as Brooklyn Fiber (local ISP), Sky Packets (provider of smart city applications such as mesh networks), Pioneer Works (a community art and technology experimentation center in Red Hook), among others. These internships have turned into full-time employment for 5 Digital Stewards, and part-time employment for approximately 20 out of the 47 that had completed the program as of 2016 (Bussey, 2016).

101 Internships last two to three months.
**Evaluating the Digital Stewards Program**

Over the course of six years, the program has transformed from radio production to disaster preparedness to neighborhood WIFI to job training for the tech sector. The common factor is the focus on positive development and growth for Red Hook young adults, who face daily challenges affiliated with poverty, racism, violence, police brutality, geographic isolation, and access to opportunity. Understanding and even evaluating the success and gains of the Red Hook Digital Stewards program is complex for this reason. For funders, one of the major indicators of success is employment, whether the completion of the program leads to a job for a participant is key (Schloss, 2016; Bussey, 2016). However, this is an incomplete indicator for success. Oftentimes when young adults join the program, they did so to earn money since they are paid as students over the course of eight months.

Many of the young adults were not necessarily interested in technology or media production, and “just needed something to do” (Digital Stewards Focus Group, 2016). As one former Digital Steward said, “Well, my main goal when I joined the program was to find a job and work. I was like, ‘I graduated high school, and it's time for me to work’” (Digital Stewards Focus Group, 2016). Several Digital Stewards never had formal employment before and transforming these young adults into “professionals” over eight months amid the chaos of their lives is very difficult (Schloss, 2016; Bussey, 2016, Ortega-Williams, 2016; Ryan, 2016). Bussey believes the biggest challenge for participants in the program is believing that one is capable and deserving because of other life stresses (Bussey, 2016). He further explained:

This self-doubt is very real in the operation, so you’re trying to learn about how a Wifi network works and install one, but you’re also in survival mode. The skills as they’re learning on the job are abstract, then when you have things that aren’t abstract like getting kicked out of school, having nowhere to live, having children, all of these real, in your face concerns... So it’s like how much energy can you give to learning.

One afternoon over the summer of 2016, I was at Ferris assisting the Digital Stewards with their various assignments during a work session. Javon Webb, a 20-year old member of Generation 9, started telling his friends and colleagues about an unfair interaction he had with the police who followed, stopped, and frisked him over the prior weekend. As he recounted what happened to him, every single Digital Steward stopped what they were doing and listened intensely. This moment struck me. As I worked with and observed the Digital Stewards over the summer, I noticed how difficult it was to get all of their attentions at once.

After Javon told his story, every individual began sharing similar narratives, and the group was no longer interested in working and were all passionately raging about the unfair behaviors of the police in their neighborhood. I was deeply saddened by these painful stories and said, “These
experiences are terrible. All these skills you are learning here, you can use them to elevate your stories. You can put them out there. These are really clear injustices.” I was advocating that they create socially transformative community media. And the response I got from everyone was, “No, no, no – I don’t have time for that. I’m not interested in that. I don’t want to tell my story. I just want to learn, get skills, and get a good job so that I can get out. I just want to get out of Red Hook.”

On one hand, the Digital Stewards were passionately telling their story, and they could not stop telling their story. There was clearly a need for an outlet and this type of self-expression. However, the Digital Stewards had absolutely no interest in using their tech and media production skills or anything else they were learning in the program to push for justice by amplifying their voice. Bussey made sense of this contradiction: “As much as these young adults’ need to tell their story, there’s also a resignation within themselves and their lives in general. To them: ‘Shit is not going to change. Nothing is going to matter anyway.’ They vent as a reaction, as a reflex, but somewhere inside, they feel like nothing’s going to change no matter what they do.” A social worker at Red Hook corroborated this claim, and explained how recounting their unfair experiences to one another was therapeutic. (This was true for the community media projects in the therapeutic networking category from the typology too, but the difference was that in those endeavors it was happening digitally).

One of the obvious activities that connect Stewards’ lived experience and their tech and media learning in the program is the #blacklivesmatter movement, which started as a social media hashtag in 2013, and has been a combination of digital and on the ground protests and actions ever since then. However, the young adults’ reaction to the #blacklivesmatter movement was not necessarily one of hope and enthusiasm. “Of course black lives matter,” exclaimed one of the Digital Stewards. “But the movement only talks about the loss of certain people, what about Deion Fludd?”

Black men are regularly harassed by the police in Red Hook, and Fludd is just one example of a lost loved one. “We don’t see how that movement affects us in Red Hook because there was no justice for Fludd or anybody else here,” exclaimed another Digital Steward. This unfair reality cultivates “the resignation and the intangibility of how tech and media skills could address these larger structural injustices in Red Hook” that Bussey described. Perhaps these worldviews explain why many of Digital Stewards see the program as a pathway out of their troubled neighborhood and/or why many Digital Stewards do not necessarily find employment once the program is over.

102 Deion Fludd of Red Hook was mysteriously killed in a Brownsville, Brooklyn subway station in 2013. Fludd accompanied his girlfriend on to the platform of the subway to wait for the train with her before she boarded. They both squeezed through the subway on the single swipe of the card. Approximately forty minutes later, Fludd was transported to the hospital injured and unconscious. The New York Police Department, officers tried to arrest Fludd for fare evasion and he resisted, jumped onto the tracks, and was hit by a train. However, the next day, when Fludd awoke in his hospital bed, he claimed that the police beat him after he climbed back onto the subway platform. Fludd passed away after nine weeks from complications from his injuries (Cantu, 2015).
When Schloss first conceived of the Digital Stewards program as a way to train young adults to build the Red Hook WIFI network post-Sandy, the endeavor’s ideology aligned with the Detroit Community Technology Project’s digital justice principles regarding access, participation, common ownership, and healthy communities.\(^\text{103}\) The Red Hook WIFI network was to be a community development tool that gave young adults an important purpose in their neighborhood and once expanded, redirect funds that would normally go to large third-party Internet Service Provider outside the neighborhood, towards Digital Steward incomes. These Digital Stewards would then maintain the infrastructure and design neighborhood and local applications for the network that would benefit the overall community. This vision has not yet been fully implemented since the program needed to take other directions to sustain itself. Though many former Digital Stewards remain in Red Hook, several do not necessarily want to stay (as demonstrated above), which defeats the original purpose of a truly youth-led, community-controlled infrastructure.

I asked Schloss how he views the various transformations of his program beginning with youth radio in 2009 focused on self-expression to disaster preparedness to technology and media training focused on job readiness. I inquired, “Do you feel that the focus on jobs and economic development has detracted from having a political voice?” Schloss answered, “There is nothing more political and powerful than having a steady income.” Schloss is referring to all the other skills and qualities that are needed for steady employment that Bussey tries to teach his students throughout the program such as responsibility, confidence and perseverance. In the end, it is these qualities that allows one to thrive. (Schloss, 2016; Bussey, 2016; Ortega-Williams, 2016). Bussey further explained:

> Even just realizing that it does matter when I show up, how I show up. Just getting one lesson, hearing it and practicing it, which a lot of young people [in Red Hook] for multiple reasons don’t have an opportunity to see or practice what these very basic professional expectations are. For me, that’s a huge success because it creates another type of opportunity for that person to be successful in their own life.

Former and current Digital Stewards (as of 2016) shared their thoughts with me via interviews and focus groups about what they gained from the program. One woman who was just about to complete the program when I met her said, “Tech is more than metal or wires. It’s people, teamwork, and about passion.” More than tangible skills, the young adults discussed a new broadened understanding and appreciation of technology; exposure to new ideas, people, and places as well as an increase in self-confidence and a strong sense of community within their cohorts. For example, Parkinson stated, “I was mature before, but I’m way more mature than I was before...Digital Stewards kind of helped me with that too.” He continued:

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\(^{103}\) The Detroit Digital Justice Principles can be found here: [https://www.alliedmedia.org/ddjc/principles](https://www.alliedmedia.org/ddjc/principles) (Accessed: 2017)
People are actually coming out of that program with knowledge that they didn't even think they were going to get. It’s opening doors and opening our eyes to a better life, basically. Especially people in the neighborhood because they have that mindset that they can’t even leave the neighborhood, but once you take them to Detroit\(^\text{104}\) and stuff like that, it’s like wow, I want to do more of that. I want to make more connections. I want to network more. That’s dope to me.

Similarly, Smith said:

One of the successes of that program is that it inspires a lot of people. Applicants that went through the program...they felt very empowered when they left, which is really key especially when you have environments like Red Hook where people don’t really give a lot of people from communities like this a chance to actually prove themselves in the workforce.

The other theme that emerged among the Digital Stewards during focus groups was how through the process of learning about technology and digital networking, they also saw the importance of social networking and building relationships with people whether it was within their cohort or with others in their neighborhood such business owners in “the back.” The Digital Steward cohorts were supportive “learning communities”, and as one participant put it: “We challenged each other about knowing more.” Another said, “We’re all friends now; we came in here and created stuff together and bonded.”

While many commented that they learned about computer networking, which they had no knowledge of before, the social ties they formed through the program also helped build their knowledge. One Digital Steward noted, “Networking or creating relationships with different people was the most important skill I gained as a Digital Steward.” Another remarked, “Someone I met through Bootcamp said, ‘You guys can come here and intern’ and that opened the door. That’s when I learned how it was an important skill to have, meeting a network of people.” Many of the Digital Stewards I spoke with realized that while computer networks such as Red Hook WIFI were needed to get work done, so were social networks because they provided emotional support, manpower, information, connections to a larger world. In this way, the WIFI network and the Digital Stewards’ social networks enhanced one another – each making the other stronger (Digital Steward Focus Group, 2016).

Though several Digital Stewards discussed how they saw the program as a ticket out of the neighborhood, others did discuss their attachment to Red Hook and wanting to improve their

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\(^{104}\) A select number of Digital Stewards have had the opportunity to travel to various conferences in Berlin, Germany; Detroit, Michigan; and present at MIT in Cambridge, Massachusetts.
community after completing the program. Smith, one of the original architects of Red Hook WIFI and now an intern at Google stated, “I always tell people that I’m definitely going to invest in someone because someone invested in me, and I definitely do live by that. I will definitely come back to Red Hook and the Digital Stewards and help in any way that I can.”

Understanding Red Hook WIFI through Participatory Action Research

Thus far, this case study had told the story of Red Hook WIFI and the Digital Steward Program’s development, as well as described the various impacts the technology and program has had in the community and upon Digital Stewards. To better understand community perceptions and usage patterns of the network, I, the RHI program staff, and the Red Hook Digital Stewards (specifically generations 8 and 9) co-designed and co-administered a survey\(^{105}\) in the neighborhood about Red Hook WIFI.\(^ {106}\) Our main research questions were:

- Who in the neighborhood is using Red Hook WIFI?
- Who in the neighborhood is benefitting from Red Hook WIFI?
- In what ways are these people using the communication infrastructures?
- How could RHI and the Digital Stewards improve Red Hook WIFI to better address neighborhood needs?

We also aimed to use the survey as an educational tool to inform respondents about the free neighborhood WIFI and its potential for the future if they were previously unaware. This section presents the results and analysis of the data.

Administering this survey was particularly challenging because respondents were forced to imagine how a local network like Red Hook WIFI connected one to resources and assets beyond “the Internet for free.” What is it about having constant access to the Internet at no cost that is so vital to our productivity and access to opportunities? The survey pushed respondents to ponder this question. The idea of a local network that may or may not provide access to the global Internet is exciting – geographic communities can have their own autonomous communication infrastructure that creates jobs within the neighborhood’s economy. However, this is only true if a critical mass of residents truly understands how community WIFI networks operate because otherwise its purpose gets lost and the network is not used to its full potential.

As described in-depth throughout the chapter, the Generation 1 Digital Stewards built the original Red Hook WIFI mesh network, but once it was put in place, there were few ways for future Digital Stewards to engage with the hardware. This is notable because the Digital Stewards transfer

\(^{105}\) See appendix for survey.
\(^{106}\) The PAR process is discussed in the methodology section.
knowledge and information to their peers in the neighborhood, and could help educate residents about the mechanics and possibilities of Red Hook WIFI if continuously educated about the network.

Generation 8 and 9 Digital Stewards, who only log on to the Red Hook WIFI network, but have never actually worked with its hardware and software, co-designed, co-administered the survey, as well as co-analyzed the data with me. The Red Hook Initiative staff was most interested in understanding who knew about the network, I wanted to uncover if the network facilitated new social ties in the neighborhood, and the Red Hook Digital Stewards wanted to know how people “troubleshoot” the network when it did not work for them.

**The Sample**

The Red Hook WIFI survey had 250 respondents who either lived and/or worked in Red Hook of which roughly 54% were male, 46% female, and 1% identified as “other.” The majority of respondents, 54%, were African-American. Approximately 25% identified as Hispanic, Latino, or Spanish, 15% were White and 2% were Asian. Three percent of respondents were multiracial and 3% identified as Arab or Pacific Islander (See Table 5.1). According to the U.S. Census, as of 2014, Red Hook had a population of about 11,000 people of which 18% were White, 42.2% were Latino or Hispanic, and 35.5% were Black. Our sample is not completely representative of the overall neighborhood population given the large number of African-American respondents. However, this is the demographic group in which are Digital Stewards had the most social ties and felt comfortable administering the survey. We were not able to capture as many Latino/Hispanic/Spanish community members because the survey was only conducted in English since the Digital Stewards and I did not speak Spanish.

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107 As we were brainstorming survey questions, I suggested, “Has Red Hook WIFI helped you form new relationships in the neighborhood?” The Digital Stewards laughed and asked me, “Are you asking if Red Hook WIFI helped me get a girlfriend, because it certainly did not!” We decided my proposed question did not make sense for the survey.

108 In our pilot survey, we asked respondents “What is your race/ethnicity?” and used people’s open-ended responses to design the multiple-choice options in our final survey in order to categorize Red Hook’s population as accurately as possible.

109 This data was obtained from the Measure of America Fact Sheet from the Social Science Research Council.
A plurality of respondents, about 39%, were between the ages of 21 to 30; 20% were between the ages of 13 to 20; and 17% were between the ages of 31-40. Five percent of people who took the survey were below the age of 13 and 10% were above the age of 50. This age breakdown is quite representative of the actual Red Hook population as of 2015.

Approximately 86.4% of the respondents lived within the neighborhood and the other 13.6% travelled to the area for their jobs. Of the respondents who lived in Red Hook, 76.2% were NYCHA residents, 10.5% were homeowners, and 13.2% were non-NYCHA renters. A little less than half of the respondents, about 46%, work in the neighborhood with the majority employed by local restaurants or non-profit organizations.

### Communication Patterns in Red Hook

Understanding how people use Red Hook WIFI required also considering how people in Red Hook communicate and obtain information aside from Internet. According to respondents, the most common sources to get news about Red Hook on a daily basis and during emergencies is from family, friends, neighbors, and social media. This shows that in-person and digital “word of mouth” is how information flows through the neighborhood.

Other sources, though less cited, include local schools, local non-profit organizations, flyers, and online news sites, such as the *Red Hook Star Revue*. The *Red Hook Star Revue* is a controversial local news outlet in the neighborhood started by a white male resident George Fiala. Dabriah Alston, an employee of RHI and a lifelong Red Hook resident explained, “Some people really hate the reporting because they feel it’s too biased.” (Personal Interview with Dabriah Alston, 2016). Several other Red Hook non-profit employees reiterated this claim. Table 5.2 shows there is not a huge difference among NYCHA renters, non-NYCHA renters, and homeowners in the way people obtain information in Red Hook. A greater percentage of homeowners listen to the radio and use online news sites, and a greater percentage of non-NYCHA renters refer to the Red Hook WIFI splash page.

### Table 5.1 Sample Characteristics

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<td>5%</td>
</tr>
<tr>
<td>13 to 20</td>
<td>20%</td>
</tr>
<tr>
<td>21 to 30</td>
<td>39%</td>
</tr>
<tr>
<td>31 to 40</td>
<td>17%</td>
</tr>
<tr>
<td>41 to 50</td>
<td>9%</td>
</tr>
<tr>
<td>50+</td>
<td>10%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Housing Status</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>NYCHA Renters</td>
<td>76%</td>
</tr>
<tr>
<td>Non-NYCHA Renters</td>
<td>11%</td>
</tr>
<tr>
<td>Homeowners</td>
<td>13%</td>
</tr>
</tbody>
</table>

229
Table 5.2 How do you get your information about events, happenings, and incidents in Red Hook? (Respondents checked all that applied)

<table>
<thead>
<tr>
<th>HOUSING TYPE</th>
<th>NYCHA Renters</th>
<th>Non-NYCHA Renters</th>
<th>Homeowners</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family</td>
<td>75.3%</td>
<td>73.1%</td>
<td>77.3%</td>
</tr>
<tr>
<td>Friends</td>
<td>81.7%</td>
<td>80.8%</td>
<td>63.4%</td>
</tr>
<tr>
<td>Neighbors</td>
<td>60.1%</td>
<td>65.4%</td>
<td>63.4%</td>
</tr>
<tr>
<td>Schools</td>
<td>17.7%</td>
<td>15.4%</td>
<td>22.7%</td>
</tr>
<tr>
<td>Non-Profit Organizations</td>
<td>8.2%</td>
<td>15.4%</td>
<td>22.7%</td>
</tr>
<tr>
<td>Religious Organizations</td>
<td>3.8%</td>
<td>3.9%</td>
<td>4.6%</td>
</tr>
<tr>
<td>Local Businesses</td>
<td>6.3%</td>
<td>15.4%</td>
<td>22.7%</td>
</tr>
<tr>
<td>Social Media</td>
<td>33.5%</td>
<td>42.3%</td>
<td>50.0%</td>
</tr>
<tr>
<td>Online News Sites</td>
<td>15.8%</td>
<td>7.7%</td>
<td>22.7%</td>
</tr>
<tr>
<td>Flyers</td>
<td>19.6%</td>
<td>11.5%</td>
<td>13.6%</td>
</tr>
<tr>
<td>Bulletin</td>
<td>5.7%</td>
<td>7.7%</td>
<td>9.1%</td>
</tr>
<tr>
<td>Radio</td>
<td>2.5%</td>
<td>0.0%</td>
<td>18.2%</td>
</tr>
<tr>
<td>Red Hook WIFI</td>
<td>3.8%</td>
<td>15.4%</td>
<td>4.6%</td>
</tr>
<tr>
<td>Red Hook Hub</td>
<td>1.9%</td>
<td>7.7%</td>
<td>4.6%</td>
</tr>
<tr>
<td>Other</td>
<td>3.8%</td>
<td>11.5%</td>
<td>9.1%</td>
</tr>
</tbody>
</table>

Red Hook WIFI

Before presenting questions about Red Hook WIFI specifically, we asked residents to rate on a scale of 1 (not important) to 5 (very important), how important free wifi was to them. Seventy-two percent of respondents said that free wifi was important or very important to them. Table 5.3 provides insights as to why an individual felt free wifi was important or not to them. The selected quotes represent sentiments that were echoed multiple times throughout the surveys. For respondents who did not feel free WIFI was important, the most popular answer was that one did not use the Internet or that “more important” items were needed for free in Red Hook. For respondents who felt that wifi was important, many described how the Internet was access to information. Free wifi meant this access existed anytime, anywhere, which is especially important for those who cannot afford to pay for the Internet. People also explained how important free wifi was to find employment and even complete work for one’s job.

Table 5.3 Importance of Free WIFI

<table>
<thead>
<tr>
<th>On a scale of 1-5, how important is free WIFI to you? 1 being NOT important at all and 5 being VERY important.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-2</td>
</tr>
</tbody>
</table>

- “I never use the Internet.”
- “There are more pressing things we need for free.”
- “Free WIFI is not safe.”
- “I usually use WIFI to access social media, but that is not a necessity.”
<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>12.6%</td>
</tr>
<tr>
<td></td>
<td>“I don’t know what WIFI is…”</td>
</tr>
<tr>
<td></td>
<td>“This does not really matter to me.”</td>
</tr>
<tr>
<td></td>
<td>“Always working. Don’t have time for WIFI.”</td>
</tr>
<tr>
<td></td>
<td>“I believe even though free is good, everyone on the same network will slow it down.”</td>
</tr>
<tr>
<td>4-5</td>
<td>71.6%</td>
</tr>
<tr>
<td></td>
<td>“People cannot afford WIFI.”</td>
</tr>
<tr>
<td></td>
<td>“It keeps the neighborhood connected.”</td>
</tr>
<tr>
<td></td>
<td>“Wifi is important for job applications.”</td>
</tr>
<tr>
<td></td>
<td>“Helps my employees communicate.”</td>
</tr>
<tr>
<td></td>
<td>“Helps me get information all the time, anywhere.”</td>
</tr>
<tr>
<td></td>
<td>“Helps us accomplish more in the neighborhood.”</td>
</tr>
<tr>
<td></td>
<td>“WIFI is a public good.”</td>
</tr>
<tr>
<td></td>
<td>“To provide free wifi and give back to the community is a positive message to others.”</td>
</tr>
<tr>
<td></td>
<td>“We need to modernize.”</td>
</tr>
<tr>
<td></td>
<td>“WIFI should be free to elders.”</td>
</tr>
<tr>
<td></td>
<td>“WIFI should be free for unemployed individuals”</td>
</tr>
<tr>
<td></td>
<td>“The means we live by have changed; you need WIFI.”</td>
</tr>
<tr>
<td></td>
<td>“I can play music at community events and play video games outside with my peers.”</td>
</tr>
<tr>
<td></td>
<td>“Everybody is always on the Internet.”</td>
</tr>
<tr>
<td></td>
<td>“Helps me when I am low on data.”</td>
</tr>
<tr>
<td></td>
<td>“More efficiency during an emergency.”</td>
</tr>
</tbody>
</table>

About half of the survey respondents (51%) knew about Red Hook WIFI prior to taking the survey. If the participant did not know about Red Hook WIFI, the researcher would present a brief history and provide a postcard with a map that indicated where hotspots were located in the neighborhood. If a respondent did not about know Red Hook WIFI, then surveyor advised them to skip the questions about the service and just complete the section about communication behavior, information outlets, and the future of free wifi in the neighborhood.

Only 10% of respondents reported that they knew about Red Hook WIFI before Superstorm Sandy and about 22% learned about the service during or immediately after the natural disaster in 2012. Sixteen percent learned about Red Hook WIFI in 2013; another 16.4% learned about it in 2014; and about 35% learned about it in 2015 or 2016. The two main ways respondents became aware of Red Hook WIFI was either through a staff member of the Red Hook Initiative (35%) or simply through the appearance of the network on a mobile device (28%). Another 12% of respondents heard

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110 This does not include the 49% who learned about Red Hook WIFI by taking the survey in 2016.
about the service from someone in the neighborhood not affiliated with RHI and 9% learned about Red Hook WIFI from a flyer.

The main users of Red Hook WIFI are renters in the neighborhood (NYCHA and non-NYCHA), though approximately 50% of renters and homeowners alike knew about the network before taking the survey (Table 5.4). About one quarter of renters who responded to the survey use the network daily whereas none of the homeowner respondents use it daily. Interestingly enough, men and women use Red Hook WIFI differently. A higher percentage of women use the network to complete work for their jobs, to find employment, and to finish schoolwork and homework. A slightly higher percentage of men use Red Hook WIFI to access entertainment (See Table 5.5). One of the Digital Stewards suggested that this particular finding may be biased because the survey team consisted of all males of color and one female of color. These young men were more likely to survey their male peers and friends, and the women they surveyed were RHI employees.

Table 5.4 Red Hook WIFI Usage by Housing Type

<table>
<thead>
<tr>
<th>HOUSING TYPE</th>
<th>Daily</th>
<th>Weekly</th>
<th>Monthly</th>
<th>Once in a While</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>NYCHA Renters (167</td>
<td>76.2%)</td>
<td>25.5%</td>
<td>16.7%</td>
<td>2.4%</td>
<td>40.0%</td>
</tr>
<tr>
<td>Non-NYCHA Renters (29</td>
<td>13.24%)</td>
<td>26.7%</td>
<td>6.7%</td>
<td>0.0%</td>
<td>53.4%</td>
</tr>
<tr>
<td>Homeowners (23</td>
<td>10.5%)</td>
<td>0.0%</td>
<td>27.3%</td>
<td>9.0%</td>
<td>36.4%</td>
</tr>
</tbody>
</table>

Table 5.5 What do you use Red Hook WIFI for?
(Respondents ranked up to 8 options)

<table>
<thead>
<tr>
<th>GENDER</th>
<th>Male (65)</th>
<th>Female (42)</th>
</tr>
</thead>
<tbody>
<tr>
<td>To complete work for my job</td>
<td>36.9%</td>
<td>50.0%</td>
</tr>
<tr>
<td>To find employment</td>
<td>36.9%</td>
<td>52.4%</td>
</tr>
<tr>
<td>For educational purposes (i.e. school work; homework)</td>
<td>29.2%</td>
<td>42.9%</td>
</tr>
<tr>
<td>For community organizing</td>
<td>12.3%</td>
<td>31.0%</td>
</tr>
<tr>
<td>Staying in touch (i.e. social media; e-mail)</td>
<td>55.4%</td>
<td>64.3%</td>
</tr>
<tr>
<td>Getting news</td>
<td>23.1%</td>
<td>40.5%</td>
</tr>
<tr>
<td>Entertainment</td>
<td>63.1%</td>
<td>57.1%</td>
</tr>
<tr>
<td>Finding Red Hook specific information (resources or events)</td>
<td>10.8%</td>
<td>33.3%</td>
</tr>
<tr>
<td>Other</td>
<td>9.2%</td>
<td>16.7%</td>
</tr>
</tbody>
</table>
The most popular places to use Red Hook WIFI include inside and outside the Red Hook Initiative (95% of respondents have used the service in this location), inside and outside the Miccio Center (55%), Coffey Park (50%), along Lorraine Street (32%), and in Tea Park (20%).

However, only 20% of Red Hook WIFI users claimed to log onto it daily, and 40% of respondents claimed they use it “once in a while.” In fact, 20% of people who knew about the service never actually use it. The reasons listed for not using Red Hook WIFI included:

- “I already pay for my own data and Internet.”
- “Red Hook WIFI often does not work.”
- “I don’t need it that much”

The second reason, “Red Hook WIFI often does not work” probably became less of an issue when the network changed from mesh to point to point in 2015.

When respondents did use Red Hook WIFI, they did so mostly for entertainment, staying in touch, to find employment, to complete work for one’s job, and for educational purposes. This finding is particularly interesting because usually “entertainment” is not considered a valuable resource worth investing in by funders. To sell Red Hook WIFI to foundations, donors, and the city agencies, workforce development, access to employment, and education are much more convincing reasons. Entertainment, though, is also a needed and a meaningful asset. For example, Red Hook young adults may use Red Hook WIFI to stream YouTube videos of rappers and other musical artists that speak about their plight and issues relevant to their lives, facilitating a larger sense of belonging.
One of the main goals that RHI program staff had for the survey was to be able to assess an internal program goal: \textit{75 percent of respondents strongly agree or agree that Red Hook WIFI allows them to be more connected to people, information, and events happening in Red Hook.} Therefore, we asked respondents: “How much do you agree or disagree with the following statement? Red Hook WIFI and the Digital Stewards allow me to be more connected to people, information, or events in Red Hook.”

People answered as follows:

\textbf{Table 5.7 Red Hook WIFI and the DS allow me to be more connected to people, information, or events in Red Hook.}

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>16.7%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
<td>37.9%</td>
</tr>
</tbody>
</table>
While approximately 55% of respondents strongly agreed or agreed with the statement, it is important to note that 40% chose the option “I don’t know”, which indicated that Red Hook WIFI itself, the Digital Stewards, and its overall community effects remain a mystery to many Red Hook residents. We acknowledge that this question may have been confusing for respondents, but during the pilot survey, the Digital Stewards discussed how even though an individual may not use Red Hook WIFI, the DS program and activities such as Boot Camp were examples of community building. The Digital Stewards did not want to split the question into two separate inquiries, asking about Red Hook WIFI and the Digital Stewards program individually, because of concerns about the length of the survey.

**The Future of Red Hook WIFI**

It is difficult for people to quickly imagine how to improve a free neighborhood network in great detail beyond hardware mechanics. The most prevalent answers to the question “How could Red Hook WIFI be more useful to you in the future?” were:

- “Put it in the NYCHA homes”
- “Put it in the stores/my own business”
- “Keep people safe in an emergency”

These answers reflect the current buzz or plans around the network, which is probably why they were so common. In terms of disaster preparedness, people did not seem to know how the network could keep them safe in an emergency beyond providing the infrastructure for text and e-mail alerts. Other answers demonstrated the desire and need for unlimited data. For example:

- “Help makes calls when data isn’t available”
- “Can play Pokémon Go all around the neighborhood and watch movies all around the neighborhood without data troubles”
- “Free is good so I do not get charged for data”
- “It would help me not waste all my data”
- “I like creating websites to remote my video game cooperation. I use a hot spot with limited data so free WIFI is a big help.”
There was also some awareness that a neighborhood network could serve as a community development tool. Such answers included:

- “Create local applications”
- “It would be useful if it could help me get a job”
- “Have local hangouts in their hotspots and charger ports”
- “Have hot spots that are more scenic to create cool hangouts”
- “Build better communications with others as well as the community”
- “Bring fun and opportunity to the neighborhood”

A handful of answers linked Red Hook WIFI to youth opportunities, and saw the future of the network as opportunity for youth:

- “Make more things for kids to do on WIFI”
- “My kids would have something to do if there was more free WIFI”
- “If free WIFI were available at my job, then I could bring my kids with me there to do homework”
- “Allow young people to connect more through social media on free WIFI”
- “More games and opportunities for kids”
- “If there was WIFI in the NYCHA homes then kids would stay inside and it would make the community safer”

The last quote was not a common sentiment (it appeared about three times in the 181 responses to this question), but it did stand out to a number of Digital Stewards, who strongly rejected the notion that kids made the neighborhood dangerous and that free Red Hook WIFI would make the community safer. The Digital Stewards did agree that there were several ways that the network could benefit young people and brainstormed these possibilities extensively, which included building a space for young adult Red Hook fashion designers to sell their products or using the network to organize in-person events and parties.

Using Data to Innovate Red Hook WIFI

After we finished collecting and analyzing the data, four of the Digital Stewards used the preliminary descriptive statistics to prototype applications for the network. We aimed to explore how data from our survey could help the DS improve and innovate around Red Hook WIFI. For example, the survey results show that one of the main reasons people use Red Hook WIFI is to search for employment or complete work for their job. Accordingly, each Digital Steward used this information to individually develop and design a prototype for how Red Hook WIFI could better address unemployment or worker productivity in the neighborhood. The Digital Stewards developed their
ideas solo for thirty minutes, and then had three minutes to pitch their concept back to the larger team with time for questions and answers from their colleagues. We expanded this activity to think about other neighborhood issues that WIFI could help address such as affordable housing and New York City Housing Authority (NYCHA) maintenance, connecting with neighbors, and disaster preparedness. This sort of workshop can be used with the larger Red Hook community to help people imagine the possibilities for their network.

Table 5.8 Red Hook WIFI Application Brainstorm

<table>
<thead>
<tr>
<th>Application Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment App:</td>
<td>When you are in Red Hook, this app allows you to upload your resume. The Digital Stewards or other employees in the neighborhood would then review this resume and e-mail the sender a list of jobs in the area that s/he are qualified for based on credentials. Businesses in the neighborhood with openings would pay a membership fee for the match-making service.</td>
</tr>
<tr>
<td>Housing App:</td>
<td>As you connect to Red Hook WIFI on your mobile device or computer, there will be a NYCHA housing tab in which you can submit questions, grievances, repair requests etc. about your apartment. This information goes straight to NYCHA officials who will be obligated to respond within 48 hours of the request. Perhaps a Digital Steward or another employee in the neighborhood could manage the app and follow-up if the individual does not get a timely response from NYCHA. This app would also allow NYCHA residents in Red Hook to compile and document all their communication with the agency.</td>
</tr>
<tr>
<td>Meet New People App:</td>
<td>The Red Hook WIFI network should host a site similar to Facebook just for the neighborhood. You can only access the site if you are in the neighborhood logged on to the network. Anybody with an address in the area can create a profile and describe what types of people they are hoping to meet. The app would allow you to see who is near you in the neighborhood and message people. Local businesses may want to advertise on the app as more locals subscribe to it.</td>
</tr>
<tr>
<td>Emergency App:</td>
<td>This would be a messaging service for anyone logged on to Red Hook WIFI. Even if your phone or cable bill was not paid for, you would receive these emergency messages about extreme weather, violence, or other crisis information. The app would be managed by the Digital Stewards, who would craft and deploy messages in times of emergency.</td>
</tr>
</tbody>
</table>

**Recommendations, & Future Research**

The results of this survey show that while residents are excited about and benefit from free Red Hook WIFI, about 50% of respondents still did not know about the network. Awareness about Red Hook WIFI is likely to grow through the implementation of the RISE grant as more small
businesses in the area host routers and benefit from services. Additionally, re-integrating Red Hook WIFI into the Digital Steward program will also increase knowledge of the network as these young adults share this information with peers. In the future, Digital Stewards could build and maintain a living history of Red Hook WIFI to document the birth of the network and its transformation to its various reiterations, expansions, and purposes. Content would take the form of oral histories, interviews, photos, and reporting. This living history could live online through a Tumblr or blog, and new generations could contribute to it while they are learning various tech skills. This living history would serve as a learning resource for new generations and other communities interested in building their own network.

Conducting deeper demographic analyses to understand how people use or could potentially utilize Red Hook WIFI differently depending on their sex, age, employment status, and location of residence would help the Red Hook Initiative commission, design, and deploy technologies that appropriately serve the diversity of the community. This survey project begins to do that, but it may be helpful for the Digital Stewards to host focus groups with different categories of residents to more deeply hone in on specific behaviors and needs. A Red Hook WIFI advisory council representing the interests of these various identities may also be beneficial to guide the future of the network.

Moving forward, RHI staff should work to aid organizers and non-profit organizations in the neighborhood with their social justice advocacy work through the Red Hook WIFI network. If people were able to see how neighborhood WIFI could help them address important issues such as police harassment the network would be all the more powerful and would allow people to see its possibilities beyond just “free Internet.” In addition to the apps described previously, a neighborhood server could store community data.

The Future of Neighborhood Networking: RISE and Beyond

One of the great successes I feel that stem from this network, is how it inspired other communities to do the same thing. I feel like that's, if anything, one of the most important things because from the very beginning, that was our goal, to build this model so that other communities can be inspired to do the same, exact thing.
- Robert Smith, Digital Steward

Red Hook WIFI is expanding throughout 2017 and 2018 because RHI won a Resilient Innovations for a Stronger Economy (RISE) grant from the NYC Economic Development Corporation in 2015. Seventeen neighborhood small businesses will host routers and new cohorts of Digital Stewards will install them. Additionally, Resilient Communities NYC, an initiative of New America, is managing the creation of other Digital Stewards program in five climate-vulnerable, low-income neighborhoods across New York City, also through a RISE grant. The purpose of RISE is to provide New York City’s small businesses affected by Superstorm Sandy with free technological resiliency improvements to help them prepare for future storms and the impact of climate change (Personal Interview with Kristin Bell, 2016; Personal Interview with Kokei Otosi, 2016).
“This is an opportunity to think about the vulnerabilities that Sandy exposed,” said Kristin Bell, the Program Manager of RISE at EDC. She continued, “There were entire neighborhoods that couldn’t communicate with the rest of the city. Small businesses were playing a role as community hubs and places where people were staging recovery efforts.” The technologies eligible for funding fell into one of three categories:

1) *Energy Technologies* – systems that provide clean, resilient, efficient power, keeping small businesses up and running even during grid failures.

2) *Building Systems* – solutions that improve the resiliency of critical building components before, during, and after the storm.

3) *Telecom Networks* – technologies that help small businesses stay connected and operating, even when traditional communication networks are down (https://www.nycedc.com/program/RISE-NYC, 2016).

Red Hook WIFI and Resilient Communities NYC obviously fall into the third category of Telecom Networks. EDC received 200 applications and were open to a range of applicants from non-profits, large companies like Cisco, Verizon, or T-mobile, or small businesses. They chose 11 projects or “technology providers” as winners including the Red Hook Initiative and Resilient Communities. Aside from small businesses, Red Hook WIFI and the Resilient Communities’ Wifi networks across NYC, will also benefit residents. While these area-wide benefits are eligible for funding, the major limitation is that installation of equipment can only occur at small business sites according to HUD’s Community Development Block Grant Disaster Recovery (HUD CDBG-DR) guidelines, and so applications had to focus on small businesses only. Aside from this, the key goals of the projects were replicability and scalability of the technology (Bell, 2016; Kokei, 2016).

As discussed earlier, the City of the New York and NYCHA have been working to build free WIFI networks in five public housing sites including Red Hook East and Red Hook West in Brooklyn, Queenbridge North and Queenbridge South in Queens, and Mott Haven in the Bronx since 2015. There is potential to recreate Digital Stewards programs in the Queensbridge developments and Mott Haven though these public housing networks would not be mesh or point to point, but rather a fiber optic communication system comprised of honeycomb of fiber rings throughout the housing developments that the city would own. The type of technology has an impact on how the communication system is governed. For mesh and point to point, there are multiple partners willing to host whereas fiber rings are centrally administered. This section briefly summarizes these various initiatives and analyzes the different visions and purposes community organizations and other main players have for the digital networks.
Red Hook & RISE

Since Red Hook WIFI will expand across the neighborhood with RISE funding, DS tech trainer Jabi Bussey sees several future opportunities for Digital Stewards’ learning: the customer service element, working with businesses, the upkeep and maintenance or hardware, as well as the installation piece. He believes that Digital Stewards can be the voice of technology in their neighborhoods informing people what WIFI is and how they can use it to power their lives (Bussey, 2016). However, before the Digital Stewards start physically building the network, RHI RISE project manager, Dabriah Alston needs to recruit seventeen businesses to participate.

Alston is a lifelong resident of the Red Hook Houses, and has worked on several community news and information projects such as the Red Hook HUB\textsuperscript{111} with RHI over the years. She sees herself as a cultural mediator in Red Hook. She explained, “In Red Hook, there are multiple cultures. And these different cultures care about different things and conflict with one another sometimes.” Alston is referring to the different needs of “the front” and “the back.” She knows how to speak to both groups, and therefore feels confident in convincing businesses in each area the value of hosting a router. Businesses in “the front” are more concerned about costs, so she emphasizes the “first year free” aspect of the project whereas businesses in “the back” usually already have Internet connection, so she emphasizes the resilience aspect of the project, and how these routers will be connected to back-up solar powered generators that would provide power in case there is another Sandy (Alston, 2016).

The main challenge with recruiting these small businesses to participate is the requirements outlined by EDC via HUD. Alston explained, “They [the small businesses] have to be able to show, to prove in some way, that they were affected by Hurricane Sandy. Hurricane Sandy happened years ago. So now we need some type of paperwork, pictures, damage reporting on the building or the business.” Along with this proof, the owners also have to submit their tax documents to prove their “small business status,” which most people have no desire to do. It is Alston’s job to convince them, and explain what the overall benefits would be to their business and the wider community (Alston, 2016). Red Hook WIFI would be free to the business for one year, but RHI and the small businesses need to work out a sustainable financial model after that trial period.

Because this expansion of Red Hook WIFI is funded by EDC, the focus of implementation is on small business development. Regardless, Alston has a much bigger vision for the expanded network. She sees it as a necessary infrastructure for hyperlocal news to travel throughout the neighborhood. “Before Sandy, residents of the Houses never knew what was going on in the larger neighborhood. NYCHA would hang flyers on our building bulletin boards about events related to them, but other

\textsuperscript{111} Red Hook HUB was temporary a digital bulletin board that was placed in three different places in Red Hook for residents to get and give information. It was also available online.
stuff was random word of mouth. This network, and platforms available on it such as the splash page or the Hub, can keep all residents in the know,” stated Alston.

What Does the Network Mean to RISE Grantees?
Resilient Communities, also won a RISE grant of approximately $4 million to build wireless networks in collaboration with small businesses in six low-income, climate vulnerable neighborhoods. Director of the project, Greta Byrum, worked at OTI with Josh Breitbart previously in 2011-2015. She elaborated:

...we developed an approach to working with communities to develop technology solutions and the cornerstone of that is something called Digital Stewardship which we co-developed with Allied Media Projects. And the idea of Digital Stewardship is that local people should be the stewards of technology for their own communities, meaning that they should decide how interaction with technology can build a healthy digital ecosystem and can benefit local communities and build towards the vision that they have for their communities with the use of technology.

It was this framing that guided the creation of the Red Hook Digital Stewards and Resilient Communities’ work (and continues to do so). Byrum explained that after her group received the RISE grant, they focused on Sandy impacted areas with a concentration of small businesses to find partner organizations, since this was one of the requirements of the funding. It was important to find organizations that had strong social capital within their neighborhoods and relationships with businesses and residents. They recruited Silicon Harlem in East Harlem, The Point in Hunt’s Point, the Kings Bay Y in Sheepshead’s Bay, Fifth Avenue Committee in Gowanus, the Rockaway Development and Revitalization Corporation in the Far Rockaways, and Project Hospitality in Staten Island (which has since dropped out of the project due to challenges around recruiting small businesses).

Houman Saberi, a Program Manager with Resilient Communities, who now helps these various community organizations understand local wifi networking, learned about Digital Stewardship and mesh for disaster preparedness when he read a 2014 article about the Red Hook Digital Stewards in the New York Times as a Master’s student at Columbia. He then worked with Schloss and the Digital Stewards in 2014 to better understand Internet usage in the Red Hook Houses. Saberi said:

112 As of 2017, Resilient Communities NYC is only working with five neighborhoods because Project Hospitality dropped out.
113 This is the same article I read when I was searching for research ideas regarding my dissertation that led me to work with Tony Schloss and the Red Hook Digital Stewards.
The interesting thing was they [Digital Stewards] would talk to community members in Red Hook, someone would be on their phone, connecting to Red Hook WIFI, and they’d be like, ‘Oh, I’m behind that’, and then that person would be really interested. They’re like, ‘Oh, for real? What are you doing? What’s this about?’ They would explain it, and so all of a sudden you have infrastructure which is something that’s invisible, which is exacerbated by the fact that with anything IT-related, even just the discourse of it, drives home the idea of it being ethereal, ephemeral, it’s in the cloud, it’s wireless. If we don’t see it, we don’t have to think about it, but there’s this very real physical aspect.

As Saberi works with five community partners across the city, he uses his Red Hook experience to teach people about communication infrastructures such as the Internet, and how even though invisible, these digital networks hold a lot of power for accessing, sharing, creating, and organizing around knowledge (Saberi, 2016). Each group that Resilient Communities has partnered with has a community coordinator or a point person that Byrum, Saberi, and their team interface with to teach local residents how to build a local WIFI network. There is one curriculum created in collaboration with Allied Media Projects and the Detroit Community Technology Project for all six of these coordinators, but then the coordinators modify the curriculum to fit the needs and value of the neighborhoods they are serving (Saberi, 2016; Byrum, 2016). Saberi sees community-owned networks as a new and necessary system to combat the unequally distributed effects of climate change. He stated, “If we want to actually respond well to the changing climate, then we’re going to need new orders. You can't just rely on the same unequal system of distribution of services and all of that that you could previously.”

In this way, the mesh networks that Silicon Harlem, The Point, Fifth Avenue Committee, Kings Bay Y, and the Rockaway Development and Revitalization Corporation, are learning to build through Digital Steward programs have several important resiliency characteristics. First, the Digital Stewards are a neighborhood support system that will have skills to quickly respond to outages. There will be extra back-up power for critical access points and multiple gateways for the Internet so if one gateway to the Internet goes down, there are still other functioning pathways to access it. Even if total connection to the Internet is lost, the mesh network becomes an intranet or one small digital network (Byrum, 2016; Saberi, 2016). However, the RISE project does not rely on specific mesh firmware, such as Commotion, but rather uses off-the-shelf consumer hardware and mesh firmware; it depends on the transfer of knowledge from tech experts to digital stewards to the wider community, and while mostly or all mesh may be suitable for some neighborhoods, another model, such as more point-to-point links may be better for others depending on goals and needs.

After interviewing both the staff of Resilient Communities and employees of the local partner organizations, it became evident that there were five main challenges in implementing the overall project. The first, similar to what Alston described in Red Hook, is convincing small businesses to
participate. “Why should I take on the liability of this equipment on my roof?” “I don’t want people loitering here because of free Internet.” “This seems too complicated.” “I don’t have time.” These are all common responses from business owners when they are first pitched the project (Byrum, 2016; Saberi, 2016; Shiglik, 2017; Peralta, 2017; Alexander, 2017; Jackson, 2017; de la Uz, 2017; Banks, 2017).

Second, also mentioned by Alston, business owners do not want to share their tax documents and do not have suitable documentation to prove that they were affected by Sandy, which EDC via HUD and Office of Management and Budget requires. Third, because the funding process takes so much time from applying for the grant to announcing winners to actually receiving the money, some small businesses that agreed to participate actually moved or closed. Fourth, while the grant covers the cost of building the network and operating it for approximately a year, the networks will eventually present a cost to the local groups and long-term sustainability is still in question (Byrum, 2016; Shiglik, 2017; Peralta, 2017; Alexander, 2017; Jackson, 2017; de la Uz, 2017; Banks, 2017). Byrum stated, “You could do it as a cooperative model, you could do fee for service, the local BID [business improvement district] could finance it, but all of these are really tricky and are really different.” And lastly, who owns the data about the information and activities of Internet users? Is it the local ISP or the community organization or the small businesses? There was no consensus or model on this issue as of 2017, but Resilient Communities NYC, the City of New York, the various non-profits and other partners are working to create collaborative data policies.

As Resilient Communities works with their local partners to grapple with these challenges, each organization has created their own visions for their network and Digital Steward programs. For example, while Red Hook Digital Stewards are young adults, the six New America partner organizations across NYC are planning to focus hiring on elders, immigrants, former prisoners, or any resident of the area looking for a job, not just youth. The Point in the Hunt’s Point area of South Bronx is a youth development organization focused on economic and cultural development. Echoing Alston in Red Hook, Danny Peralta, the Director of Arts and Education at The Point, is focusing on the information aspect of the network and leadership building of youth through Digital Stewardship. He stated with regard to the upcoming local wifi:

How do you get the word out to everybody about what’s happening? I know certain information. I know my colleagues know this information. Maybe some of the young people that come to the program know this information, but how about the other 40,000 people in the neighborhood? What does it mean to them? What do they know? How do we get the word out to them?

Aside from information needs, other community partners such as Project Hospitality are more focused on the disaster resilience aspect of the digital and social network they are constructing. Project Hospitality in Staten Island is a social service agency serving vulnerable populations,
particularly homeless individuals. Karen Jackson, the Minister of Social Justice at the organization would like to train future Digital Stewards to serve as block captains. Each block captain would be responsible for knocking on doors and remain a point of contact for people in designated blocks after a disaster. She explained, “I had wanted to recruit a bunch of block captains who would check in on vulnerable people in their communities before and after a natural disaster. So now we’re trying to think of how can we use this platform as one way for those block captains to communicate with people if it was not safe for them to go door to door.”

Fifth Avenue Committee (FAC), a community development organization and the Kings Bay Y are also excited about the social aspect of wifi networking. Both organizations are located in very diverse parts of New York City, and see the infrastructure as a bridging tool. FAC Executive Director Michelle de la Uz said, “Honestly, I think there’s a lot of people who live in and around Gowanus who actually don’t interact on a regular basis with the businesses in Gowanus, and the same is true with the businesses in Gowanus and local residents. The network can bring business owners and residents together.” Vadim Shiglik, the Special Projects Director at the YMCA explained how the neighborhood is comprised of Russian, Turkish, Chinese, and African-American residents. He hopes to hire Digital Stewards from all of these groups, fostering intercultural bonding. He linked these potential social relationships back to disaster preparedness: “If a young Turkish kid, or a young Russian kid, or a young Chinese kid is learning about this cool thing we are doing with building public wifi and they’re telling their church or their community center or whoever about it, it generates momentum for the overall preparedness.”

Meanwhile, Silicon Harlem and the Rockaway Development and Revitalization Corporation (RDRC) are designing their networks and Digital Steward programs to be income generators in the neighborhood. The role of Silicon Harlem pre- and post- Sandy was and is to transform the neighborhood into an innovation hub (Banks, 2016). For the CEO of Silicon Harlem, Clayton Banks, that is the role of a local network too. By teaching future Digital Stewards digital literacy, Silicon Harlem wants to prepare them for jobs and even inspire them to become entrepreneurs or local business owners themselves. Junor Barnett, the Associate Director of Information Technology and Systems Training at RCDC, explained, “With this network, the local businesses here will have the opportunity to market their products. It may even create job opportunities for local residents.”

While these various organizations work with Resilient Communities NYC to train Digital Stewards, as well as envision and build local digital and social networks, an invisible infrastructure is slowly taking form in all these neighborhoods. The hope is in each place that during a climate, social, or economic disaster, this infrastructure will be strong enough to support residents in the ways that they need.

**NYCHA Developments & Free Broadband**

The other large local networking project Red Hook WIFI inspired is Mayor DeBlasio’s promise of free broadband in NYC public housing. He has committed $7 million to facilitating this vision in
five demonstration sites. Josh Breitbart, the Senior Advisor for Broadband coordinates the Mayor’s strategy to achieve universal, affordable, high-speed broadband by 2025 for all residents and businesses. When I asked Breitbart, “How are you evaluating success or effectiveness of supplying Broadband everywhere,” he responded with: “That has not been determined yet, but if you don’t hardwire that vision of equity into infrastructure, we’re going to fall pretty far behind.”

The city chose the NYCHA Queenbridge as its pilot site because it’s the largest public housing development in North America. It houses approximately 6,900 residents in 3,147 units among 26 buildings. The wireless contractor, Spot On, is responsible for building the network to provide coverage throughout the buildings, and emphasizes that it prioritizes and creates local jobs to help maintain the service. In order to do this, small access points, had to be installed in the hall closet of every third unit. While NYCHA owns the buildings, tenant consent was not required, but NYCHA and the Mayor’s office wanted to involve residents in the creation of the digital network. Spot On hired a 29-year old lifelong Queensbridge resident, Shameya Muniz, to organize her neighbors and obtain their permission (Lewis-Krauss, 2016). There was not a community group or organization available to help anchor a full Digital Stewards program.

Breitbart deeply respects the Red Hook Digital Stewards model, but does not think it is possible to replicate in every NYCHA development. While he would love to see the program grow in other sites, he believes certain conditions need to be in place including the presence of strong, well-trusted non-profit organization with staff members that were interested in technology. When the city begins wiring the Red Hook Houses, they definitely collaborate with the Digital Stewards and make sure the gateway router to the Internet for Red Hook NYCHA residents is through Red Hook WIFI.
Circling back to chapter 3 of the dissertation, Figure 5.12 uses the categories from the Post-Disaster Community Media Typology to show the evolution of Red Hook WIFI’s purposes. Before Sandy, the network served as a platform for RHI Radio in which Red Hook young adults produced their own content about their lives and broadcasted it out to listeners. After Sandy, the network served as an emergency communication infrastructure, which allowed people to communicate within and outside the neighborhood to share information (inform). Occupy Sandy and Medina’s use of social media demonstrated the power of outward communication at this time (inform), which brought much needed money, donations, resources, and volunteers to Red Hook. The network was also being used to organize for place, as individuals logged on to coordinate volunteers. The actual expansion of the network via Brooklyn Fiber and FEMA is also an example of organizing for place, strengthening the digital and social network in the neighborhood. Finally, once Schloss founded the Red Hook Digital Stewards program to train young adults to physically build out the network, and earn an income while gaining employable media and technology skills, Red Hook WIFI embodied the principles of economic self-determination.
Table 5.9 Outcomes of Community Media

<table>
<thead>
<tr>
<th>GAINS</th>
<th>Individual</th>
<th>Collective</th>
<th>Urban</th>
</tr>
</thead>
<tbody>
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<td>Recognition</td>
<td>Therapy and support; Self-awareness</td>
<td>Processing collective trauma; group identity assertion</td>
<td>Disruption of dominant narrative as evidenced in news outlets and public dialogue</td>
</tr>
<tr>
<td>Instrumental Capacity</td>
<td>Sense of empowerment; self-efficacy</td>
<td>Stronger social ties; formation of new collectives/communities; collective efficacy</td>
<td>Expanding knowledge bases by diversifying sources; Fusion of expert + local knowledge in policy making/creation of physical plans</td>
</tr>
<tr>
<td>Asset Creation</td>
<td>Acquisition of media production + media literacy skills; employment; job readiness</td>
<td>Acquisition of public and private resources and assistance; neighborhood-run communication infrastructures</td>
<td>Public investments; Inclusive policy and plans; Economic development and workforce training programs</td>
</tr>
</tbody>
</table>

The Red Hook WIFI case also shows how this local communication system leads to the various gains outlined in chapter 3, particularly instrumental capacity and assets at the individual, collective, and urban levels in Table 5.9. The construction of the network was a way to solidify and multiply the “front-back” relationships that emerged post-Sandy into infrastructure. While this did not occur to the extent envisioned, the network still provided other forms of community-building. As Digital Stewards went through the program, they reported feeling empowered and inspired. Building the digital network and participating in Boot Camp fostered the creation of learning communities within the cohorts, as well as bridged some ties across “the front” and “the back” of the neighborhood. These relationships can be leveraged to make change around shared concerns or aspirations in the future. The NYC Economic Development Corporation and Resilient Communities NYC have relied on Red Hook Digital Stewards experiences to model a city-wide Digital Steward program in climate vulnerable areas.
Lastly, as discussed in the Introduction, there has been a longstanding debate in academia about the effects of information communication technologies (ICTs) such as radio, television, telephones, mobile devices, or Internet on the concept of community. Advocates of ICTs assert that new technologies bring humans together in communities free from geographic boundaries. In early
studies of wired developments (communities with high-speed dial-up in the early 2000s), residents recognized three times as many and talked with two times as many more people, and visited 50% more of their neighbors compared to their non-wired counterparts. On the contrary, critics worry that the increased use of ICTs in society reduces in-person communication and bonding with neighbors and other community members, diverting individuals from interest, investment, and social interaction in their own physical spaces. Because a person’s attention is split between the virtual and physical world, no one is engaged in full proper interaction required for building strong relationships. Where does Red Hook WIFI fit into this debate? Its purpose is to intensify in-group communication within a locality, but to also connect users to outside resources. This case study shows that programs such as the Red Hook Digital Stewards certainly strengthen social ties and the idea of community through the process of building and using technology. However, not every neighborhood can benefit from a mesh network the way Red Hook did because not every neighborhood has a Red Hook Initiative to do the on-the-ground organizing.

At the same time, Digital Stewards often see the program as a way to exit the neighborhood, as their “ticket out.” Their priority was to be better off after the program, not necessarily to make Red Hook better or change outside perception of their neighborhood through media production. Perhaps this is because Red Hook WIFI and Digital Stewards’ initial focus of voice and self-expression became diluted as the program and network became more about economic development. Additionally, as Red Hook WIFI grows to expand its reach within the community and serve residents better, it paradoxically moves farther away from its original mission – a self-governing communication infrastructure. Scale and efficiency requires more involvement (and thus compliance with requirements) from local government, service providers, and other partners outside the neighborhood. If the network remains truly community-owned and managed, then the improvement of the infrastructure may come at a slower pace. This tradeoff may be acceptable depending on the overall long-term vision for Red Hook WIFI.
PART IV
Chapter 6
Discussion: Comparisons, Conclusions, and Recommendations

CHAPTER SUMMARY: By reflecting on 2017 current events that occurred while this dissertation was written from the Trump presidency to Hurricanes Harvey and Maria, this chapter synthesizes, applies, and reflects on the findings. First, it compares the two case studies from chapters 4 and 5 and points to a tension between the amplification of voice and economic development, and potential variables that affect the trajectory of community media programs. Three sets of recommendations are provided for the practice of planning, disaster communications, and the economic sustainability of community media. Lastly, the chapter ends with directions for future research.

This dissertation foregrounds how people use various information communication technologies to create and share their own news, control self-representation, process trauma as well as communicate with one another in crisis situations. In the field of planning, scholars and practitioners must recognize and support these organic digital activities as they theorize and implement public participation. By understanding how the urban ecology of place relates to that place’s communication and media ecology, planners can identify the “ecology of knowledges” that exist in and about that place. I see community media as homologous to “ecology of knowledges” as it is the curation and production of local information and diverse perspectives in shareable forms.

After President Donald Trump took office in January 2017, this has not been any easy time to design, conduct, and write a dissertation on this subject. Trump continually attacks both left-wing and right-wing mainstream media and seems to believe that all news that is critical of him is “fake news.” For Trump, the most reliable source of information is his Twitter account. He has even threatened to revoke broadcast licenses (Nakamura, 2017). Similar to the disappearance of data from government websites and the exclusion of journalists from White House briefings, these attacks on the media mimic how authoritarians create a society where differences in worldviews, opinions, and cultures are silenced.

In these tumultuous times, there is a critical need for autonomous, locally-rooted structures of resistance such as community media. It can create a pathway for subversion if need be and solidarity. I acknowledge that I may not agree with the veracity or values of all community media, and there is a dark side to community too. (Arguably, Trump and his followers are the subversives). How do audiences know if and when community media is authentic fact? Is one person’s community media another person’s fake news? In the context of disaster, who has the right to disseminate information to the public and decide which narratives of trauma and recovery matter? The problem of fake news

114 “The ecology of knowledges is an invitation to the promotion of non-relativistic dialogues among knowledges, granting ‘equality of opportunities’ to the different kinds of knowledge engaged in even broader epistemological disputes both at maximizing their respective contributions to build a more democratic and just society and decolonizing knowledge and power” (de Souza Santos, 2007, p. xx).
and rumors are heightened during a crisis as fear grows in the public and there is a constant demand for information (Dailey and Starbird, 2014).

I anchored the project in the context of “natural disaster” to investigate questions about community formation and public participation in the digital age because the post-Katrina and post-Sandy circumstances revealed dynamics of extreme inequality. Nonetheless, I argue that my findings hold true for any type of disaster because what occurs during and in the aftermath of a hurricane is not just “natural”, but dictated by social, economic, and political undercurrents. For example, the Trump presidency, economic downturns such as the 2008 foreclosure crisis, mass incarceration, the repeal of Deferred Action for Childhood Arrivals (DACA), hate crimes, or slow economic declines (such as in Detroit) are all crises that require those who are affected to communicate with one another and share their perspectives in order to spur necessary action.

In this final chapter, I will first conclude by comparing 2-Cent Entertainment and Red Hook WIFI, and point to important variables that affect the trajectory of community media initiatives. Next, I will discuss recurring themes that emerge from the Post-Disaster Community Media Typology, and outline related policy implications. In turn, this research adds more nuance to the definition of the popular term “resilience.” By understanding the various ways in which people use ICTs to rebuild, maintain, and even invent community as a means of amplifying voice, I contend that community media is an important aspect of resilience. Ultimately, I argue that planners need to consider access to voice in their work and adopt a media justice framework in their approach to designing equitable cities. Justice in the city is not only about supplying everyone the provisions for communication, civic discourse, and media production, but also envisioning sustainable structures of community control to manage these activities.

2-Cent Entertainment and Red Hook WIFI: Comparisons

I found three key structural differences between 2-Cent Entertainment and Red Hook WIFI: 1) their organizational form; 2) their leadership; and 3) their relationship to physical space. These differences highlight how the multi-scalar gains of community media: recognition, instrumental capacity, and asset creation emerge and evolve in various contexts. As of 2016, 2-Cent Entertainment was no longer producing their own content, but operated as a media skills education and literacy program. Meanwhile, as of 2016, the Red Hook Digital Stewards were preparing for their 11th cohort of Red Hook young adults, and planning to expand Red Hook WIFI across the neighborhood through the NYCEDC RISE grant. As the 2-Cent Entertainment Collective shrunk to three core members over the years, Red Hook WIFI grew to not only include members of the Red Hook Initiative and neighborhood businesses, but also various new partners such as NYCEDC, NYCHA, and Sky Packets. Both initiatives began in order to create outlets of self-expression for young people of color, and each transformed into education and workforce training programs; albeit in two very dissimilar ways.
Organizational Form

2-Cent Entertainment used the 501(c)(3) status of their fiscal sponsor, Youthanasia, and obtained their LLC status in June 2005. The collective was fluid, and members participated on a project-by-project basis. The three core members – Brandan Odums, Kevin Griffin, and Amanda B. – led and guided the operations of the group. By contrast, the umbrella organization for Red Hook WIFI and the Red Hook Digital Stewards – the Red Hook Initiative – is a well-established, non-profit fixture in the neighborhood. The organizational form of the two groups determined the ease with which each entity could fundraise and receive support from foundations. Due to 2-Cent Entertainment’s informality and lack of its own 501(c)(3) status, the collective was not able to easily receive funds or apply for grants. The complete opposite was true for the Red Hook Initiative. This organization proved to be a magnet for donors and philanthropic aid. Their strong reputation in the community, committed finance department, and high-powered board were assets for fundraising. However, money that flowed into the organization also dictated the direction of the Red Hook Digital Stewards and Red Hook WIFI program. While 2-Cent Entertainment was not a fully sustainable enterprise, the group’s lack of funding did not tie them to specific requirements or agendas.

Leadership

Chapters 4 and 5 highlighted two leaders: Brandan Odums and Tony Schloss. 2-Cent Entertainment and Red Hook WIFI owed much to the ideas of these two visionaries. While many collaborators were crucial to the success of the community media programs, the strong leadership of Odums and Schloss pushed the programs forward. In fact, once Odums left New Orleans to travel the country on a graffiti art tour in 2015 and 2016, 2-Cent Entertainment practically ceased operating. The relationships that participants of 2-Cent Entertainment and Red Hook Digital Stewards had to the programs may have also been influenced by their respective leaders. Odums was a peer and friend to all his collaborators. Most importantly, Odums shared the same racial identity and thus embodied experience of 2-Cent participants. There was an understanding, mutual respect, and enthusiasm based on this shared identity among everyone in the group.

While Schloss was a longtime resident of Red Hook, as well as a beloved community member and mentor to Red Hook youth, he was not a peer to Digital Stewards in the way Odums was to 2-Cent members. He was seen as an authority figure and he was a White male who was empathetic to the struggles of Red Hook youth such as police harassment, but never had to endure it himself. These two examples demonstrate that the relationship that one has to the community media and/or grassroots technology is different depending on whether the task starts from within your social network or is imposed upon you. 2-Cent members created their productions without profit or a business plan because their purpose was clear: to tell their own story. While Red Hook Digital

115 Because Schloss was so well-respected by Red Hook Youth, his racial identity did not deter him from forging close relationships. One Digital Steward even once said to me, “Tony looks White, but he is actually Black.”
Stewards did take pride in their work and seemed to enjoy the overall program, their main motivation was a paycheck and future employment.

**Relationship to Physical Space**

Until 2014, 2-Cent did not have its own gathering space. The members worked out of each other’s homes, in co-working spaces and coffee shops. They were not neighborhood-based, but rather saw themselves as representing Black youth throughout New Orleans. When Odums opened his solo exhibition at StudioBe (an abandoned warehouse) in the Bywater, members of the collective would “hang out or drop by” and former students of 2-Cent’s education programs saw the space as a community gathering location (Odums, 2016; Manda B., 2016; Griffin, 2016). This is not a parallel neighborhood space to the Red Hook Initiative, but a temporary exception that underscores the basic difference in rootedness between the two neighborhood initiatives. While this dissertation argues that the process of media production is a community building tool that solidifies social ties, the 2-Cent case demonstrates how important physical space is for maintaining and strengthening a social network too. Both the Red Hook Initiative office space on Hicks Street and the Digital Stewards space on Ferris Street served as geographic anchors for residents of the neighborhood, which were especially important post-Sandy. The Hicks Street location became an emergency information hub, and the Ferris Street building provided room for the Digital Stewards to learn and grow together in pursuit of their technical trainings.

**Lessons Learned**

The comparison between 2-Cent Media and the Red Hook Digital Stewards highlights different successes and challenges of the community media endeavors. While each program fits into all of the categories of the Post-Disaster Community Media Typology – while most overtly exemplifying *income-generate* (economic self-determination) – the key differences between them show how recognition, instrumental capacity, and asset creation are achieved through various avenues (see Table 6.1 *Outcomes of 2-Cent Community Media* and see Table 6.2 *Outcomes of Red Hook WIFI and Digital Stewards Program*). Organizational form, leadership, and relationship to physical space are factors that influence the trajectory and gains of a community media program. These aspects point to important variables of study in future research about community media and its effects on the concept of “community” and social change.

The difference in organizational form between the two cases led to a tension between amplifying voice and facilitating economic development. The informality of 2-Cent allowed the collective to have complete autonomy over their voice and media products. However, their lack of 501(c)(3) status and traditional, identifiable organizational form made it difficult for the group to sustain themselves financially. On the other hand, the visibility of the Red Hook Initiative among donors and funders allowed the Red Hook Digital Stewards program to grow and thrive. Its original mission, which started as the Red Hook Radio, was creative expression. With the advent of Red Hook WIFI, the mission transformed into developing and maintaining an autonomous communication and
news infrastructure that allowed for creative expression and workforce development among Red Hook youth. Yet as the WIFI network expands and the program grew with funding and organizational partners, community members lost their control over it. They must abide by funding requirements, which focus more on economic development goals rather than self-expression.

In low-income communities of color, having voice and having an income are equally important and necessary for an effective democracy. As Tony Schloss of The Red Hook Initiative stated, “There is nothing more political and powerful than having a steady income” (see chapter 5). However, this goal should not come at the cost of “being heard” (see chapter 1). In the case of the Red Hook Digital Stewards, this could be achieved by directly relating the trainings and media products to social justice issues around the neighborhood. As shown in their attitudes towards #Blacklivesmatter, the later generations of Digital Stewards did not see the importance of their voice, and that lesson and inspiration needed to be built into the curriculum.

**Conclusions from the Typology**

In this dissertation, I first conceptualized the digital strategies that people use to communicate with one another, tell their stories, rebuild, and engage in civic life post-disaster. Next, I characterized the impacts of these activities and explored “who gains” from them. The typology provides a broader spectrum of public participation endeavors that are possible through ICTs than what planners typically take into account, and also highlights important patterns in the media and communication ecologies of neighborhoods, non-spatial communities, and cities. (See Table 6.1 *Post-Disaster Community Media Typology* and Table 6.2 *Outcomes of Community Media* below).

**Table 6.1 Post-Disaster Community Media Typology**

<table>
<thead>
<tr>
<th>Primary Action</th>
<th>Community Media Type</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inform</td>
<td>Resource Sharing</td>
<td>To give someone facts or information</td>
</tr>
<tr>
<td>Investigate</td>
<td>Bottom-Up Journalism</td>
<td>To carry out a systematic or formal inquiry to discover information or examine the facts</td>
</tr>
<tr>
<td>Incite</td>
<td>Organize for Place</td>
<td>To move facts or information to action; stir up; spur on; urge on in a certain geography</td>
</tr>
<tr>
<td>Include</td>
<td>Crowd-Sourced Deliberation</td>
<td>To gather and discuss facts or information</td>
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<td>-------------------------</td>
<td>--------------------------------------------------</td>
<td>--------------------------------------------</td>
</tr>
<tr>
<td>Interact</td>
<td>Therapeutic Networking</td>
<td>To support one another emotionally using facts or information</td>
</tr>
<tr>
<td>Interpret</td>
<td>Memorialization</td>
<td>To explain or tell the meaning of facts or information for present and future audiences</td>
</tr>
<tr>
<td>Income-Generate</td>
<td>Economic Self-Determination</td>
<td>To create a livelihood from the creation and dissemination of facts or information</td>
</tr>
</tbody>
</table>

Table 6.2 *Outcomes of Community Media*

<table>
<thead>
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<th>GAINS</th>
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</tr>
<tr>
<td>Capacity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asset Creation</td>
<td>Acquisition of media production + media literacy skills; employment; job readiness</td>
<td>Acquisition of public and private resources and assistance; neighborhood-run communication infrastructures</td>
<td>Public investments; Inclusive policy and plans; Economic development and workforce training programs</td>
</tr>
</tbody>
</table>
Information flows from informal blogs to mainstream media

Many of the community media examples profiled in chapter 3 of the dissertation had a similar relationship to mainstream media. Leah Mahan summarized it clearly when describing her online storytelling initiative: “People felt overlooked or ignored by mainstream media so we created Bridge the Gulf, and then it became a resource for the mainstream media.” Individuals and groups were compelled to use ICTs to tell their own stories because the traditional outlets failed to do so. Karen Gadbois of The Lens, Robert Morris of The Messenger, Timolynn Sams of The Trumpet, founders of katrinatruth.org, Justin Auciello of Jersey Shore Hurricane News, and the creators of Sandy Storyline all echoed this relationship with mainstream media.

While it is certainly a success when the contents and voice of community media are represented in mainstream media (a form of recognition), there is also a dilemma. Auciello of Jersey Shore Hurricane News explained: “[JSHN] changed mainstream media because professionally trained reporters were able to mine it for tips and information and make money off it. The irony was I was doing all the work and I wasn’t making any money, but they were making money by taking my information.” All of these initiatives, including 2-Cent Entertainment, struggle with financial sustainability. How can community media makers’ narratives achieve recognition without corporate media companies capitalizing off of someone else’s local knowledge? How can individuals and communities benefit financially from the dissemination of their own stories?

When grassroots activism is funded by venture capital

Once venture capitalists see potential in a grassroots movement, the original mission of the initiative may shift and no longer address the needs of the intended constituents. Again, it is certainly a success or form of recognition when a community media program is supported in this way. However, as seen with the Red Hook Digital Stewards, funding often has strings attached to it, which may transform the project for better or worse, depending on the founders’ and participants’ goals. The clearest example of this is Neighborland, the art installation project turned mobile app that allowed New Orleanians to easily voice their hopes and concerns, as well as organize around redevelopment projects. After Neighborland connected with venture capitalists in San Francisco, it turned into a national civic engagement consulting firm. Rather than building and using a tool in their own community, the founders advised city agencies and non-profit organizations in other cities how to use it. This does not reflect the spirit of community media. In essence, Neighborland assumed a role similar to AmericaSpeaks, which had a large budget to use mediated processes for crowdsourcing during the post-Katrina Community Congresses. While it can be argued that firms such as Neighborland and AmericaSpeaks help facilitate the creation of community media, there is also evidence that local authorities use these platforms to coordinate participation, but provide residents with limited voice and influence on actual decision-making.
From storytelling to memory making to identity assertion

As individuals tell their own stories through ICTs or as grassroots media producers document others’ narratives, these truths get cemented into public memory, and even lead to group identity assertion. As Leo Chiang explained in producing a documentary about the Vietnamese community in New Orleans East, “Whatever narrative I shaped, subjects saw this consciously and subconsciously as the story they wanted to tell.” This inspired Hyuong Nguyen of VAYLA to start vlogging because she saw that if the Vietnamese youth were not more active in amplifying their voice, their identities and histories would surely be forgotten. 2-Cent Entertainment felt the same way about Black youth in New Orleans pre- and post-Katrina. As show in Table 6.1, group identity assertion is a form of instrumental capacity.

Building trust through community media production

One of the main research questions for this dissertation was: Does the grassroots use of ICTs in the post-disaster context lead to new forms of social relations and civic engagement in the digital era? In almost every single interview with community media makers, respondents discussed how the process of creating digital media with or for others fostered trust. Either one single person became a reliable, trustworthy source of information for a community or several people built relationships through mutual aid and the sharing of lived experiences. The Red Hook WIFI case study demonstrated how the actual construction of the network and the Digital Steward production of small business videos formed bridges between the front and the back of the neighborhood. Additionally, several examples from the Typology revealed how the act of sharing local knowledge on various platforms facilitated trust among strangers in hyperlocal digital space, which led to stronger social ties in physical space. This phenomenon, as seen with Rising Tide or Occupy Sandy, also prepares individuals to assist one another in future crises.

The paradox of civic media

I began this dissertation by defining my object of study – community media – as also a form of civic media. I decided to frame my project around community media rather than the umbrella term civic media because I was interested in investigating the “community” effects of bottom-up digital activities. Civic media is the use of technology to enhance civic engagement (Jenkins, 2007; Gordon and Mihailidis, 2016). However, this broad definition does not capture the differentiation in projects, users, motivations, needs, sponsorship, and outcomes. It does not offer a critical lens. For example, efforts such as the AmericaSpeaks’ mediated town halls are deemed examples of valuable civic engagement. Yet, in this case, civic media became a paradox and served as a platform for local governments to coordinate participation by providing residents with limited voice and influence in city decision-making (Wagner, 2010). Individuals and groups who suffer most from inequality stand to gain the most from producing community media and expressing their voice, however their marginalized status may exclude them from meaningfully participating in civic life. The cost of participating, cultural barriers, or lack of acknowledgement from governing bodies prevents
inclusivity in mediated discourse (Thompson, 2005; Young, 2002; Shapiro, 1999; Fiorina, 1999; Fainstein, 2000). *Table 6.1 Outcomes of Community Media* provides a way to begin analyzing the politics of civic media and ask “who gains” from these activities.

**Recommendations for Policy Makers and Planners: Incorporating Media Justice**

Findings from the Post-Disaster Community Media Typology and the two in-depth case-studies point to several policy implications, which I have outlined below into three areas: the practice of planning, disaster communication, and the economic sustainability of community media.

*The Practice of Planning*

- First and foremost, city planning practitioners and scholars must include access to communication and media production as an issue area in the field. The outcomes of planning are evaluated through the ideals of procedural or distributive justice, but neither of these perspectives critically examines how individuals form and obtain knowledge to make sense of problems in the first place. In the book, *The Communication Crisis in America and How to Fix It*, Lewis Friedland (2016) summarizes eight critical information needs of local communities. 116 “Critical information needs must be met for citizens and community members to live safe and healthy lives; have full and fair access to educational, employment, and business opportunities; and to fully participate in the civic and democratic lives of their communities (p. 4).” The eight critical information needs are (p. 5):

  1) Emergencies and risks, both immediate and long-term
  2) Health and welfare, including specifically local health information as well as group-specific health information where it exists
  3) Education, including the quality of local schools and choices available to parents
  4) Transportation, including available alternatives, costs, and schedules
  5) Economic opportunities, including job information, job training, and small business assistance
  6) The environment, including information about air and water quality; environmental threats to health; and access to restoration and recreation
  7) Civic information, including information on civic institutions and opportunities to associate with others

116 In 2012, the FCC funded the University of Southern California to use research to propose a set of critical information needs. USC scholars and a team of academics from the Communication Policy Research Network (CPRN) drew from a variety of disciplines to define and summarize critical information needs.
Planners address and work on all the topics that these critical information needs cover, but tend to forget about actual access to the critical information and communication. By understanding the storytelling networks (Ball-Rokeach, Kim, and Matei, 2001) of the communities they work in, planners can support and strengthen communication and media ecologies, as well as enter them (if appropriate) to truly learn about a place and its people. Planners must remember that communication and media justice is not simply about addressing digital divide or providing access to a specific tool or platform, but also acknowledging that different communities have their own unique information ecologies.

- As planners design public participation efforts for city plans and policies, they should use the Typology to figure out how residents already engage and provide meaningful feedback about their living environments through community media. Rather than organizing a town hall or charrette, it may be more effective to collaborate with individuals and groups on the ground that are trusted information conveyors.

**Disaster Communication**

- Several of the examples in the Inform category of the Typology were about low-powered FM radio, which proved to be one of the most reliable ways to communicate and share information with people during and in the immediate aftermath of a disaster. Nonetheless, acquiring a license for a new LPFM radio station is complicated and competitive. The Federal Communications Commission (FCC) should grant temporary licenses to all individuals and organizations who request them one week prior up until one month after the storm. These licenses should be valid for at least three months after issuance.

- Local governments need to invest in stronger, more resilient communication infrastructures, such as local wifi networks. Franchise agreements with cable companies (discussed in detail in the next section) should require companies to invest in emergency communication systems.

- Funders should support community media before and after natural disasters as a preparedness strategy, as well as a recovery and rebuilding strategy. This dissertation
shows that local media production builds social capital, which in turn fosters cooperation in crisis moments (Solnit, 2009; Klinenberg, 2015). Additionally, funders should be more flexible about who they fund. By only paying attention to official designations such 501(c)(3) statuses, informal groups doing important organizing work such as Occupy Sandy or 2-Cent Entertainment do not get the opportunity to contribute in greater ways to their community and city.

The Economic Sustainability of Community Media

• When evaluating the impact of community media initiatives, funders tend to focus on the asset creation aspect of these programs because they are tangible and easy to measure. However, equal value should be given to gains such as recognition and instrumental capacity. These components are essential for a healthy, functioning democracy. Future research should identify indicators to represent these other multi-scalar outcomes so funders are willing to invest in them. Economic development should not take precedence over voice, especially in low-income communities of color where both access to income and civic discourse is needed. Programs that integrate both goals in their design are ideal. Red Hook WIFI and the Digital Stewards program is a start to such a vision, and cities should continue to invest in community-controlled communication infrastructure, but these programs should emphasize the importance of political voice too.

• New media technologies have altered traditional funding models of media, and this in turn has changed the way individuals and communities consume information (Napoli, 2016). One of the biggest challenges for community media programs is financial sustainability. In fact, media corporations benefit from the free labor of bottom-up journalists, who struggle to earn income by addressing their communities’ critical information needs. There should be more incentives in place for corporations to address the disparities in communication and media production access. In the 1970s, when the modern cable industry began, cable companies needed permission from cities to break public streets and lay their technology, which led to franchise agreements. Local municipalities could collect a portion of cable profits, and cable companies also needed to provide community organizations with studio production space for their own programming, as well as access to public, educational, and governmental (PEG) channels (Drew, 2013). Versions of these agreements still exist today in cities with other ICT-related companies, such as wifi and mobile telecom services. However, the public benefits should be greater and more targeted towards improving underserved communities’ storytelling networks and information systems, as well as overall media literacy.
The communications industry should mirror the real estate industry’s policy of community benefit agreements (CBA’s). CBAs are contracts signed between community based organizations and a real estate developer that obligate the developer to give back to the local community or neighborhood in the form of public space, affordable housing, or jobs. To that end, cities should obligate ICT companies that franchise with the city to invest directly into community media programs.

While this dissertation has shed light on how and why people use ICTs to produce community media, future research should investigate how to implement these recommendations.

Democracy and Disaster Resilience

The introduction of this dissertation presented the various conceptualizations of disaster resilience from social capital (Aldrich, 2012), attributes of infrastructure and systems (Flynn, 2007), governance (Tierney, 2012), to questions of equity (Vale, 2014; Vale and Campanella, 2005). Susan Cutter provides a broad definition of disaster resilience: “The ability to prepare, plan for, absorb, recover from or more successfully adapt to actual or potential adverse events” (2016, p. 742). This dissertation argues that an individual or community’s ability to “bounce back” from disaster is dependent on whether that individual or community has voice, and is heard amongst other community members, the larger public, and decision makers. Accordingly, access to communication and knowledge production through digital media is a necessary component of disaster resilience because these activities shape if and how people share, as well as obtain emergency information, uncover hidden truths, disrupt biased dominant narratives, process trauma, memorialize history, incite collective actions, and even facilitate self-determination.

The creation of community media is a form of documentation or research, which Appadurai (2006) claims is an absolute essential capacity for democratic citizenship. When individuals and groups of people document and discuss their observations, they are raising their own and each other’s consciousness. Appadurai states, “The capacity to do research [or create community media], in this broad sense, is also tied to what I have recently called ‘the capacity to aspire’, the social and cultural capacity to plan, hope, desire, and achieve socially valuable goals” (Appadurai, 2006, p. 176). Disasters are times of information deficits when the polity is dispersed and mourning. As seen through various examples from the typology, when federal authorities and other experts take charge during this chaos, and dictate how the city should recover and rebuild, they do not account for all interests. A functioning democracy is most crucial in these contexts, and that is exactly why access to communication and knowledge production through digital media is a necessary component of disaster resilience. During and immediately after crisis, people must be able to give and get survival information, and in the months to years after crisis, people should be able to influence recovery and rebuilding policies. These actions are not merely a result of having access to the appropriate ICT or voting for representative local officials. To Appadurai’s point, these actions are tied to and enhance the ‘capacity to aspire’ and pursue self-agency.
As I was writing this dissertation, Hurricane Harvey made landfall on the Texas Gulf Coast on August 25th, Hurricane Irma hit Florida on September 10th after pummeling through several Caribbean islands, and Hurricane Maria devastated Puerto Rico on September 20th. Mainstream media covered the storms as they were occurring and the immediate aftermath, but then slowly stories of these disasters began to disappear because of the short attention span of mainstream national news (Martinez, 2014).

The Washington Post reported on August 28th, 2017:

When social media was in its infancy, Americans watched in horror as Hurricane Katrina inundated New Orleans, marooning residents on rooftops, where they helplessly waved white sheets and held up signs for passing helicopters, often to no avail. Twelve years, several smartphone releases and billions of tweets later — as a powerful storm hovered over America’s fourth-largest metropolis — social media allowed many Houstonians to take their fate into their own hands. Using social media, flood victims who still had power were able to communicate with public officials directly or to bypass them entirely and coordinate their own rescues with private citizens.

This exemplifies the first category (Inform) of the typology, and shows how important it is for residents to have access to ICTs and particular platforms. Future studies should investigate if this survival communication practice was limited to certain demographic groups. After Hurricane Maria, Puerto Rico was almost entirely without electricity. All telecom and power infrastructure was virtually destroyed including cell towers, Internet cables, and even submarine cables (Becker, 2017).

Journalist Rachel Becker, writes in The Verge with regard to post-Maria Puerto Rico, “Communication after a disaster of this scale isn’t just a matter of convenience; it’s life and death. With temperatures climbing over 90 degrees, no refrigeration for food or medication, and no water, more people will die, especially those who are older, injured, sick, differently abled, or alone – especially if they have no way to call for help” (Becker, 2017). In his New Yorker article “What Puerto Rico Needs After Hurricane Katrina” writer James Carroll states, “The scale of recent devastation has been slow to register in the wide American imagination, partly because infrastructure damage has made communication difficult, if not often impossible” (2017). While post-Katrina New Orleans received an ample amount of media coverage, albeit much of it racist and offensive, the humanitarian crisis involving 3.4 million citizens in post-Maria Puerto Rico seems to not exist for news outlets, and the federal government (Resnick and Barclay, 2017).

Even though Puerto Ricans have been citizens of the United States since 1917 through the Jones-Shafroth Act, and even though under the Stafford Act, the federal government must treat the island like a state in response to disasters, Hurricane Maria shows that the territory’s colonial and racist relationship with the United States is neither democratic nor fair. Federal response and FEMA proved to be slow, and President Trump even criticized survivors on the island being lazy and wanting
“things done for them” (President Trump’s Twitter, September 30, 2017). Through social media, Puerto Ricans and San Juan Mayor Carmen Yulin Cruz were able to contest this narrative.

As emergency responders, the federal government, and foundations work to rebuild these places, they should locate the storytelling networks (Ball-Rokeach, Kim, and Matei, 2001) in communities to repair and strengthen them and identify informal groups such as 2-Cent Entertainment that do on-the-ground cultural organizing, and invest in them. Most importantly, they should build and fund local infrastructures, systems, and programs that will amplify the voice of inhabitants in the long-term as they process the trauma and memorialize the tragedy.

**Contributions and Future Directions**

Building on existing research about the importance of social ties and trust as a disaster preparedness strategy (Cutter, 2015), this dissertation shows that the processes of mediated communication and media production during crisis eventually leads to collective efficacy for those who may or may not be in the same geography, supporting the arguments of Hampton (2013), Shirky (2009), and Haythornwaite (2005). This process in itself is a form of emancipatory resilience (Vale and Campanella, 2005) supporting Rodriguez’s findings about the role of community media in crisis situations. The community media examples I studied served various demographics, and while I paid attention to race and socioeconomics, more analysis is needed to understand inequality in access to communication and media production. Future research should further explore the racial dynamics and socioeconomic politics of these processes.

Beyond disasters, while planning scholars and practitioners emphasize the importance of public participation and different types of information in deliberation (Corburn, 2003; Innes, 2007), they do not engage with or investigate media ecologies. Several of the examples demonstrated how the flow of information traveled across platforms from social media to a bulletin board, or cameras to digital maps, or a print newspaper to the Internet, highlighting the media ecology of different places and non-spatial communities. This research demonstrates that in order to understand the worldviews of the inhabitants in a place, planners should pay attention to, study, and appropriately intervene in these media ecologies. The typology and community media gains matrix offer frameworks to conceptualize how community development efforts make use of a variety of new media technologies and characterize the impacts of such engagement, providing framework for planners to comprehend and practice public participation in the digital age. Future research should verify and test the generalizability of the typology in other post-disaster contexts and locations.

Reflecting back on fieldwork, I was reminded why I was motivated to complete this research project. One of my most salient memories was In Red Hook, where the lived experience of Jazzhane Wade, a former Digital Steward, embodied 2-Cent’s motto: “Even if your voice shakes, you have to give your two cents.” Jazzhane’s most important lesson learned through the program’s various technology trainings was: “There are people out there who actually want to listen to what I got to
say, so I better say it.” Groups such as 2-Cent and the Red Hook Initiative have empowered people like Jazzhane during times of crisis when resiliency is tested. The future of participatory democracy depends on whether Jazzhane and others like her have access to co-creating platforms and media to continue sharing their voice.
Appendix 1
List of Interviews
(In Chronological Order)

New Orleans

1. Daniel Parham, Co-Founder, Neighborland
   October 11, 2015

2. Renee Feltz, Katrina Aftermath Media Project (KAMP)
   November 17, 2015

3. Trish Stringer, Katrina Aftermath Media Project (KAMP)
   November 19, 2015

4. Shannon Dosemagen, Executive Director, Public lab
   January 7, 2016

5. Stevie Lewis, Outreach Director, Public Lab
   January 7, 2016

   January 13, 2016

7. Darcy McKinnon, Executive Director, New Orleans Video Access Center
   January 13, 2016
   November 9, 2016

8. Luisa Dantas, Filmmaker & Founder, Land of Opportunity
   January 14, 2016
   March 15, 2016
   November 23, 2016

   January 8, 2016

10. Virginia Saussy, Broadmoor Improvement Association
    January 15, 2016

11. Timolynn Sams, Executive Director, Neighborhood Partnership Network
    January 20, 2016

12. David Winkle-Schmidt, Journalist
    January 20, 2016

13. Jesse Hardman, Founder, The Listening Post
    January 21, 2016

14. Tuan Nguyen, Executive Director, Mary Queen of Vietnam CDC
    January 22, 2016

15. Julia Kumari-Drapkin, Founder, iSeeChange
    January 23, 2016
16. Jordan Flaherty, Journalist & Activist  
    January 27, 2016

17. Abram Himelstein, Co-Founder, The Neighborhood Story Project  
    January 28, 2016

18. Bart Everson, Blogger, b.rox.com  
    January 28, 2016

    February 1, 2016

20. Kevin Griffin, 2-Cent Entertainment  
    March 8, 2016  
    November 18, 2016

    March 15, 2016  
    December 1, 2016

22. Ada McMahon, Bridge the Gulf & Land of Opportunity  
    March 16, 2016

23. Amanda B., 2-Cent Entertainment  
    March 16, 2016  
    December 1, 2016

24. Jolene Pinder, Director, New Orleans Film Society  
    March 16, 2016

25. George Haddow, Bullock and Haddow, LLC  
    Tulane University Disaster Resilience Leadership Academy  
    March 18, 2016

26. Rebecca Cooper, Lower Ninth Ward Living Museum  
    March 22, 2016

27. Sara Slaughter, Antenna  
    March 23, 2016

28. Bob Sneed, Executive Director, Antenna  
    March 23, 2016

29. Nick Slie, Co-Founder, Mondo Bizarro  
    March 28, 2016

30. Leo Chiang, A Village Called Versailles  
    October 17, 2016

31. Sara Estes Cohen, Deputy Chief Information Officer, City of New Orleans  
    November 10, 2016

32. Huong Nguyen, VAYLA  
    November 14, 2016
33. Sarah Griffin Thibodeaux, The Times-Picayune  
   November 15, 2016
34. Leah Mahan, Co-Founder, Bridge the Gulf  
   November 21, 2016
35. Liz Dunnebacke, New Orleans Video Access Center  
   November 21, 2016
36. Stephen Harrell, Jr., 2-Cent Entertainment  
   November 28, 2016
37. Tapice Sparkman, If these Walls Could Talk  
   November 28, 2016
38. Gizmo, 2-Cent Entertainment  
   November 29, 2016
39. Nick Richard, 2-Cent Entertainment  
   November 29, 2016
40. Jon-Devin Carrere, 2-Cent Entertainment  
   November 29, 2016
41. Paulette Clay, Faubourg Lafitte Tenant’s Association  
   November 30, 2016
42. Gene Fredericks, New Orleans Video Access Center  
   December 2, 2016
43. Madania Ali Graves, 2-Cent Entertainment  
   December 2, 2016
44. Renard Bridgewater, The Times-Picayune  
   December 10, 2016
45. Burwell Ware, New Orleans Video Access Center  
   December 14, 2016
46. Evan Casper-Futterman, Land of Opportunity  
   July 1, 2016
47. Andrew Kolker, New Orleans Video Access Center  
   January 6, 2017
48. Louis Alvarez, New Orleans Video Access Center  
   January 13, 2017
49. Jenka Soderberg, Common Ground Private Radio  
   May 27, 2017
1. Houman Saberi, Program Associate, Resilient Communities
   June 9, 2016
2. Greta Byrum, Director, Resilient Communities
   June 13, 2016
3. Helena Wong, CAAAV Organizing Asian Communities
   August 3, 2016
4. Alyx Baldwin, Open Technology Institute & Red Hook Digital Stewards
   June 29, 2016
5. Tony Schloss, Director of Technology, Red Hook Digital Stewards
   July 5, 2016
6. Diana Nucera, New America
   July 13, 2006
7. Andy Gunn, New America
   July 13, 2006
8. Kokei Otosi, Smart Cities & Sustainability Initiatives
   New York City Economic Development Corporation
   July 13, 2006
9. Katherine Ortiz, Resilient Communities NYC & Red Hook Digital Stewards
   July 18, 2016
10. Robert Smith, Red Hook Digital Stewards
    July 19, 2016
11. Michael Premo, Co-Founder, Sandy Storyline
    July 25, 2016
12. Rachel Falcone, Co-Founder, Sandy Storyline
    July 25, 2016
13. Larry Fishburne, Red Hook Digital Steward
    July 25, 2016
14. Josh Breitbart, Senior Advisor for Broadband at the Office of the Mayor
    July 25, 2016
15. Frances Medina, Red Hook Initiative
    July 26, 2016
16. Daphne Lundi, Flood Resilience Planner, NYC Department of Planning
    July 27, 2016
17. Meghan Marie, Occupy Sandy
    July 27, 2016
18. Alden Parkinson, Red Hook Digital Stewards
    July 29, 2016
19. Desiree Matel-Anderson, Field Innovation Team  
   August 1, 2016
20. Carlos Pareja, Global Action Project  
   August 2, 2016
21. Drew Hornbein, Occupy Sandy  
   August 3, 2016
22. Alex Coles, Red Hook Digital Stewards  
   August 4, 2016
23. Dara Messinger, Director of Public Programs, Downtown Community Television Center  
   August 8, 2016
24. Catherine Martinez, Managing Director, Downtown Community Television Center  
   August 8, 2016
25. Shannon Sonrouille, Development Director, Downtown Community Television Center  
   August 8, 2016
26. Jonathan Lief, Executive Producer, BK Live, BRIC TV  
   August 10, 2016
27. Kuye Youngblood, Head of Development & Production, BRIC TV  
   August 10, 2016
28. Anthony Palermo, Manager, NYCHA Premise Broadband Initiatives  
   August 16, 2016
29. Jaebi Bussey, Technology Trainer  
   Red Hook Digital Stewards  
   August 17, 2016
30. Dabriaah Alston, Red Hook Digital Stewards  
   August 23, 2016
31. Anna Ortega-Williams, Director of Training and Evaluation, Red Hook Initiative  
   August 30, 2016
32. Michael Cox, Community Coordinator, NYCHA  
   August 31, 2016
   September 14, 2016
34. Alex Mallis, Meerkat Media & Occupy Sandy  
   January 13, 2017
35. Gillian Kaye, Director, Brooklyn Recovery Fund, Brooklyn Community Foundation  
   January 19, 2017
36. Vadim Shiglik, Special Projects Director, Kings Bay Y  
   January 20, 2017
37. Kevin Alexander, President, The Rockaway Development and Revitalization Corporation
   January 25, 2017

38. Valerie West, VP of Operations, The Rockaway Development and Revitalization Corporation
   January 25, 2017

   January 25, 2017

40. Clayton Banks, Founder, Silicon Harlem
    January 27, 2017

41. Anthony Sanford, Silicon Harlem
    January 27, 2017

42. Reverend Karen Jackson, Director of Recovery and Community Initiatives
    Project Hospitality
    January 27, 2017

43. Danny Peralta, Executive Managing Director, The Point
    January 30, 2017

44. Michelle de la Uz, Executive Director, Fifth Avenue Committee
    January 30, 2017

45. Justin Auciello, Founder, Jersey Shore Hurricane News
    March 24, 2017

Focus Groups with Digital Stewards

July 1, 2016
July 7, 2016
July 22, 2016
August 19, 2016
September 2, 2016
Appendix 2

Interview Guide

Initial Research Questions

1. How do different informal or formal collectives use community media in the aftermath of a disaster during recovery and rebuilding?

2. Does the grassroots use of ICTs in the post-disaster context lead to new forms of social relations and citizen engagement in the digital era?

3. What type of symbolic power (visibility) does community media have, and under what circumstances does it translate into material gains for a group or neighborhood (access to money, policy victories, etc.)?

Interview Questions for Members of Community-Based Organizations

GENERAL

1. How long have you been involved with [....]?

2. Can you describe your individual position and experience with [....]?

3. How would you describe [....] organization’s mission/role pre - Katrina/Sandy?

4. What’s the most important project you believe the organization is working on now? What role does the organization play in the project?

5. Did Katrina/Sandy change that mission and how?

RQ 1+2

6. What modes of communicating information did you/your organization use
   before
   during
   in the immediate aftermath of
   months to years after
   Katrina/Sandy to achieve these goals?
(Questions 4-9 may use a similar time scale as the above questions depending on how the above questions are answered).

7. How did people know about […]? How did you get people to use/listen/contribute to it?

8. Where did you/your organization get your information and news during and after Katrina/Sandy?

9. Do you/your organization pay attention to any specific forms of neighborhood-based media such as newspapers, blog sites, radio stations, etc.?

10. Did […] change the way you interacted with people inside or outside your neighborhood? Did […] help it form new relationships? If so, new ones?

11. What did you see as the success(es) of […]?

12. What do you see as the challenge(s) of […]?

13. How does your organization evaluate the effectiveness of […]?

14. What types of information were collected, shared, and/or transmitted through […]? Who were the users?

15. At what point in recovery and rebuilding do you believe that […] was most impactful? Why?

16. In what ways has […] influenced policy and decision-making in your community?

17. In what ways has […] influenced or interacted with mainstream media? Do you believe […] had changed the representation of your community in mainstream media?

18. How do we know […] is making a difference?

Interview Questions for Members of Local/State/Federal Government & Policy Officials

19. How would you describe […] agency or department’s mission/role pre - Katrina/Sandy?
20. Did Katrina/Sandy change that mission and how?

21. Who are the people you aim to serve? Who are your constituents?

22. What modes of communicating information with these people did you use
   before
   during
   in the immediate aftermath of
   months to years after
   Katrina/Sandy to achieve these goals?

23. What types of information were you communicating?
   before
   during
   in the immediate aftermath of
   months to years after
   Katrina/Sandy to achieve these goals?

24. What methods or strategies do you use to collect information from your constituents?
   before
   during
   in the immediate aftermath of
   months to years after
   Katrina/Sandy to achieve these goals?

25. How do you evaluate these efforts? What makes these efforts successful?

26. What are the challenges of […]?

27. Do you pay attention to any specific forms of neighborhood-based media such as newspapers,
   blog sites, radio stations, etc.?

28. If so, why? What do you learn from them?

29. Is so, how often do you consult […]?
30. Can you give examples of how information from your constituents or “local knowledge” is used in policy formation, funding allocations, and program design?

(May need to rephrase this question depending on how earlier questions are asked).
Appendix 3

Participatory Action Research Methodology

Participatory Action Research (PAR) is a form of collaborative inquiry in which the line between “the researcher” and “the researched” is blurred. The team collaboratively selects the research topic, generates research questions, completes data collection and analysis, as well as decides what action should happen as a result of the research findings. A PAR research process is very involved and thus I have devoted an entire section to describe how I, the Red Hook Initiative staff, and the Digital Stewards co-designed, co-administered, and co-analyzed a survey. The purpose of the survey was to better understand community perceptions and usage patterns of Red Hook WIFI, as well as identify how the network could be improved to address community needs. Every participant had an expertise to contribute to the project whether it was an intimate knowledge of the neighborhood, the Red Hook Initiative and Red Hook WIFI; experience as a Digital Steward; or training in research methodology. The benefit of PAR is that it brings together many forms of situated knowledge and lived experience to offer more valid interpretations of information (Fine and Torre, 2004). Our main research questions that we aimed to answer through survey data were:

- Who in the neighborhood is using Red Hook WIFI?
- Who in the neighborhood is benefitting from Red Hook WIFI?
- In what ways are these people using the communication infrastructures?
- How could RHI and the digital stewards improve Red Hook WIFI in the future or better address neighborhood needs?

Red Hook, Brooklyn

The Red Hook Initiative is a neighborhood-based organization in Brooklyn, New York City. Red Hook is located along the New York Bay, and is bordered by the Brooklyn-Queens Expressway to the West. As of 2014, it had a population of about 11,000 people of which 18% were White, 42.2% were Latino or Hispanic, and 35.5% were Black. Almost 38% lived below the poverty level. There is no subway service and approximately 70% of the population lives in New York City public housing (The Red Hook Houses East and West). RHI is well known for their innovative use of civic technologies in the aftermath of Superstorm Sandy (2012), specifically their Red Hook WIFI network. This program involves the training of neighborhood youth to build and maintain locally-run, resilient communication infrastructures while obtaining valuable job-skills (discussed in Chapter 5).

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117 This data was obtained from the Measure of America Fact Sheet from the Social Science Research Council.
We completed the Red Hook WIFI participatory survey project in four stages, which include: 1) Relationship Building & Project Introduction; 2) Survey Design & Research Workshops; 3) Pilot Surveys; and 4) Final Launch & Preliminary Data Analysis. These various steps occurred in succession throughout the summer of 2016.

Relationship Building & Project Introduction

During June 2016, I observed and assisted the Digital Stewards in their work space. The program is divided into three levels - I) Introduction to Information Technology, II) Digital Design, and III) Project Management. The purpose of this observation was to better understand the curriculum and the RHI approach to teaching various technology skills, as well as the participants’ relationship with Red Hook WIFI. Most importantly, this time of observation in the workspace gave me the opportunity to build personal relationships with individuals and build trust with each Digital Steward. Since RHI program staff and the Digital Stewards were already close with one another, I needed to use the month to connect with both groups. At the end of June, I gave a short presentation to the Digital Stewards about the Red Hook WIFI project in which we discussed the meaning of research and briefly reviewed an array of methodologies including surveys, interviews, participant observation, ethnography, and visual analysis. I also introduced the group to two participatory projects: The Public Science Project’s Morris Justice Project and 2-Cent Media’s New Orleans for Sale YouTube video (discussed in Chapter 4). Together, we unpacked what research questions these projects aimed to answer, and then practiced formulating research questions about the Red Hook neighborhood and residents. As each Digital Steward shared their question, s/he also explained what type of method is needed to uncover answers. The Digital Stewards asked questions such as:
• What inspires residents to make Red Hook a better place?
• What types of information will the new Red Hook Museum\textsuperscript{118} share with visitors? Are residents involved in the planning of the museum?
• How can residents decrease police harassment in Red Hook?
• Who uses Red Hook WIFI?

Using the last question as a jumping point, I asked the Digital Stewards, “What do you all want to know about Red Hook WIFI?” I explained that RHI program staff intended to conduct a survey in the neighborhood to assess their internal organizational goal, which was:

“75 percent of respondents strongly agree or agree that Red Hook WIFI allows them to be more connected to people, information, and events happening in Red Hook.”

The Digital Stewards used this goal as a starting point to develop their own questions about Red Hook WIFI including:

• Why doesn’t Red Hook WIFI always work?
• How can we improve Red Hook WIFI?
• What is Red Hook WIFI’s competition for services?
• What types of things do people use Red Hook WIFI for?
• How can we get more people to use Red Hook WIFI?

These initial inquiries helped with the evolution of the survey instrument. After this brainstorm, the Digital Stewards critiqued and improved upon the themes for the survey instrument that program staff has already developed:

**Awareness**
1) Do you know about Red Hook WIFI?
2) Do you use Red Hook WIFI?

**Frequency**
1) How often do you use Red Hook WIFI?

**Usefulness**
1) What do you use Red Hook WIFI for?

\textsuperscript{118} During the summer of 2016, city officials announced the planning of a Red Hook Museum to document and share the history of the neighborhood.
2) How can we improve Red Hook WIFI?

Adoption

1) How could we get more people to use Red Hook WIFI?

Specifically, the Digital Stewards noted that themes did not address troubleshooting – (what does one do when the Red Hook WIFI is not working?) Aside from saving money, how else does Red Hook WIFI benefit the community? We incorporated all of these thoughts into our survey design process.

Since the Digital Stewards are part of a technology training program, not all participants were necessarily interested in learning about research methodology. We discussed other possibilities for involvement in the Red Hook WIFI survey project, which would allow the young adults to use their tech skills. These activities included blogging about the survey project or even producing a mini documentary about the research results, designing and distributing a flyer via social media to inform community members about the survey, as well as online data management through Survey Monkey.

Survey Design and Research Workshops

Throughout the month of July 2016, I met with the Digital Stewards every Friday for two hours to draft and iterate the Red Hook WIFI survey instrument. Between our Friday meetings during the week, I would share the draft survey with program staff who would provide their feedback. In this way, I served as a liaison between program staff and the Digital Stewards as we all co-constructed the survey.

At the Friday workshops, we used theater improvisational games to improve the survey. For example, one Digital Steward would role play as a researcher and another Digital Steward would role play as a respondent. They would perform the survey draft for their peers and assume different types of identities (especially in the respondent role) in order to critique the questions. In another version of this game, participants were allowed to interrupt the performers, and take one of the roles themselves (researcher or respondent) with a different personality to expand the breadth of the types of interactions that may occur when actually in the field. This process was extremely helpful as we were literally able to see how questions could be interpreted differently by specific populations.

For example, in one round of the game, a Digital Steward assumed the identity of an elderly resident who did not understand what WIFI was or how it worked. This forced us as a group to rehearse explaining the network and its purpose. A Digital Steward also pretended to be a business owner who was interested in seeing how Red Hook WIFI would be beneficial to him, and that helped the group articulate ideas about connectivity, revenue, and profit. In another round of the game, participants critiqued a Digital Steward for the way he asked questions. They encouraged the performer to stand straight and speak clearly instead of mumbling. Additionally, the survey included
various multiple-choice questions, and it was this game that helped us generate answer options that we had not thought of at first.

The second game that we used to improve the Red Hook WIFI survey was called “the question game.” Digital Stewards would form a circle and could only speak to ask questions. The first player would get another’s attention by making eye contact and if anyone missed the eye contact or responded to the question with an answer, they would be eliminated from the game. Once a person is asked a question by their peer, then s/he would immediately have to make eye contact with another individual and ask a question. This game helped the Digital Stewards practice the art of making eye contact and remaining focused. We would often add restrictions to our rounds such as “only ask questions about Red Hook WIFI” or “only ask questions about being a Digital Steward.” This forced us to brainstorm quickly and think outside of the box as we designed our survey.

Pilot Surveys

On July 16th, 2016, we launched a pilot of the survey at the neighborhood event, Red Hook Walks, a street fair along Red Hook’s main commercial corridor, Van Brunt Street. Seven Digital Stewards administered 45 surveys at Red Hook Walks. We debriefed the experience of completing this fieldwork as well as analyzed the preliminary data to finalize our survey instrument. One of the main reflections that the Digital Stewards had was regarding the length of the survey. They worried that people got bored and some would even walk away without answering all questions. Another critical reflection was that the Digital Stewards (mostly African-American and all minorities) felt uncomfortable asking white people to fill out their survey. Therefore, most of the respondents for the pilot were people of color. The Red Hook Walks draft survey included questions about larger communication and WIFI trends in the neighborhood. The Digital Stewards suggested we do this in order to better situate and understand our observations about Red Hook WIFI. We asked people who their service provider was, how much they paid for Wifi, and if they were satisfied with their Wifi. We learned that people paid a monthly average of $100 for phone and Internet service. While this information was interesting, we realized after analysis, it was not particularly useful in understanding how Red Hook WIFI could be improved, and decided to remove the questions to shorten the survey.

Final Launch and Preliminary Data Analysis

We officially launched the final survey on August 10th, 2016 and completed data collection on August 26th, 2016. The majority of the surveying was completed on the ground, face-to-face. One of the Digital Stewards also designed a flyer with a link that allowed respondents to complete the survey digitally using a QR reader app on their smartphone (we collected 15 out of 251 surveys through the link).

119 For this first round of data collection, I manually entered the completed surveys into Survey Monkey, which quickly generated descriptive statistics.
120 Please see Appendix for the Final Survey.
The Digital Stewards, RHI program staff, and I strategized a location guide and schedule in order to capture a random and representative sample of Red Hook. Two to four Digital Stewards went out surveying every single day for approximately three hours, and visited different locations at various hours in the day. The Digital Stewards’ local knowledge of their neighborhood was crucial as we scouted areas for respondents. When we would arrive at one planned address and were disappointed to see a lack of people, the Digital Stewards would act quickly, text their friends and neighbors, and figure out where we could find participants for our project. While we had a guide and schedule for our surveying, we remained fluid and improvised as needed. The purple lines in Figure A.2 show our survey paths.

Figure A.2 PAR Survey Paths in Red Hook, Brooklyn (August 2016)

During the first week of surveying, I was on the ground with the Digital Stewards recruiting participants, and during the second week they were collecting data on their own. At the end of each
survey shift, I would debrief with the Digital Stewards to understand how to improve our operations for the future. The extreme summer heat was challenging for the team, and we would readjust the schedule accordingly. We would discuss how to address or deal with different types of respondents or inquiries about RHI or Red Hook WIFI. Every surveyor was also responsible for manually entering the data they collected into Survey Monkey. Data entry was a group process so we could troubleshoot how to input information that was confusing or did not make sense to the researcher.

Once data collection and entry was complete, we used Survey Monkey to generate descriptive statistics and spent three days (approximately 9 hours) completing collaborative data analysis. We began this process by reviewing the research terms we learned in July. Together, we wrote all these words on the whiteboard along with their definitions, and used our own Red Hook WIFI project to relearn the vocabulary. Each day, two Digital Stewards were responsible for starting our sessions by explaining a portion of the vocabulary and relating it to their own experiences as researchers in Red Hook.

Since our survey left us both with quantitative and qualitative data, the Digital Stewards split into two groups; one to make sense of the descriptive statistics and another to synthesize answers to the open-ended response questions. We used the below guiding questions as we analyzed our data set:

- What have we learned from this data?
- Does this data surprise us?
- How can we use this information moving forward?

Each group had their own shared Google Doc to record their questions, observations, and opinions as they sifted through the abundance of information we collected. After about an hour of working in pairs on this task, the Digital Stewards reported their findings back to the larger team and we often deliberated the many interpretations of the data. The researchers would augment their analyses and opinions with personal experiences in the field and as Red Hook residents.

In our final workshops, we aimed to explore how data from our survey could help us improve and innovate around Red Hook WIFI. For example, the survey results show that one of the main reasons people use Red Hook WIFI is to search for employment or complete work for their job. Accordingly, each Digital Steward used this information to individually develop and design a prototype for how Red Hook WIFI could better address unemployment or worker productivity in the neighborhood. The Digital Stewards developed their ideas solo for thirty minutes, and then had three minutes to pitch their concept back to the larger team with time for questions and answers from their

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121 Four Digital Stewards participated in all three days of data analysis.
colleagues. We expanded this activity to think about other neighborhood issues that WIFI could help address such as affordable housing and New York City Housing Authority (NYCHA) maintenance, connecting with neighbors, and disaster preparedness.

**Digital Steward Researcher Reflections**

The findings of the PAR survey did not capture the Spanish speaking population of Red Hook, and it was difficult for the Digital Steward researchers to convince white respondents in the neighborhood to fill it out. Every single Digital Steward who participated in this PAR project described micro-aggressions they experienced while in the field. There was a clear difference between respondents’ attitudes in the “front” of the neighborhood (near the Red Hook Houses) versus the “back” of the neighborhood (near the Pier). While some Digital Stewards attributed this difference in treatment to racism, others theorized that various sections of the neighborhood had dissimilar cultural norms. The Red Hook Houses, Lorraine Street, and Coffey Park are where the Digital Stewards felt most comfortable and described these areas as “friendly.” These places are also where the researchers knew the most people.

Surveying along Van Brunt Street where more white residents tend to be, was particularly unpopular among the Digital Stewards. The young researchers repeatedly felt disrespected by white residents, and thus felt uncomfortable approaching them. They described how more often than not, white residents would not allow them to finish their statements and would simply walk away in a rush. Even when surveying within the Red Hook Houses, the researchers avoided white respondents. “They are only walking through here to get somewhere else and are not going to want to be stopped by us,” explained the researchers. Another Digital Steward shared how he felt invisible when he decided to try and survey near Ikea and the Fairway grocery story. “Those white people over there didn’t even acknowledge that I was trying to speak to them,” he said. Another Digital Steward described his experience:

> What surprised me is how those I approached had different responses. For example, many folks walking on the Van Brunt business strip felt rude and obnoxious while people in the projects jump at the opportunity to get involved. It felt good having people in my community who know me support my work as well.

The relationships that Digital Stewards built with business owners along Van Brunt Street and other parts of Red Hook through Digital Boot Camp, in which they produced marketing videos for the local businesses, were helpful in capturing some white respondents. Pioneer Works, Dolce Brooklyn, and Wooden Sleepers were businesses that the Digital Stewards felt welcome, but still surveying on one’s block was the preferred strategy.
MIT Researcher Reflections

Burawoy (1998) also highlights the weaknesses of the extended case method, which arise from power dynamics between the researcher and community members. The PAR literature emphasizes that academic researchers and community researchers are completely equal because everyone has situated knowledge that is valuable and needed in the project. While this is indeed true, I believe that the factor that equalizes researchers in a process is the same level of prioritization and commitment to the overall inquiry. However, this can be very difficult to achieve especially when PAR involves young people in a workforce training program with many stresses in their lives. During this Red Hook WIFI survey project, one community researcher went missing for three days because he was wrongly imprisoned due to an outdated warrant. Another community researcher would at times need to leave abruptly in the middle of data collection or analysis because her childcare fell through. Such circumstances make it impossible for the community researchers to focus on the PAR project in the same way as the academic researcher, thus creating unequal interactions.

For example, even though I had the utmost respect for my community research partners, I would often have to take on the role of a boss or authority figure to hold them accountable for high-quality work, which defies the spirit of PAR. When the research project is not initiated by the community members collecting and analyzing the data, it is extremely important for the academic researcher to facilitate a real sense of ownership over the process and results among these community members by allowing the project to iterate accordingly. With regard to the Red Hook WIFI survey project, presenting a clear connection between the neighborhood network and the issues that matter most in the Digital Stewards’ lives was key.

I was particularly struck by how enraged Digital Stewards felt by police harassment in the neighborhood. Every Digital Steward had a perspective to share about the topic. Due to the limited timeline and scope of the Red Hook WIFI survey project, we were not able to fully incorporate this issue into our research, but it may have strengthened the Digital Stewards’ sense of ownership over the project. Perhaps we could have brainstormed how to use the network to address this problem. I also learned that many of the Digital Stewards saw their training in the program as a ticket to a job and life outside of Red Hook, rather than as an asset for contributing to the neighborhood, which also made developing their sense of ownership over the Red Hook WIFI survey difficult.
References


