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Democratic Communication: Lessons From The Flint Water Crisis

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DEMOCRATIC COMMUNICATION: LESSONS FROM THE FLINT WATER CRISIS

by

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DISSERTATION

Submitted to the Graduate School

of Wayne State University,

Detroit, Michigan

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DEDICATION

To my Mom and Dad for being the kids' granny nanny and Uber driver, so I could get work done.

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CHAPTER 1: “THE FLINT WATER CRISIS: A FAILURE OF DEMOCRACY”

The Flint water crisis occurred when the city switched from the Detroit Water and Sewerage Department to the Flint River. Upon the switch, the Michigan Department of Environmental Quality—the state entity responsible for overseeing water quality and safety in the State of Michigan—erroneously informed the city they did not have to add corrosion control treatment to the water. With no corrosion control in place, the corrosive river water leached lead from the aging pipes resulting in widespread levels of lead in the city’s drinking supply. It took the state nineteen months to acknowledge that corrosion control had not been in place and to issue an alert to citizens to not drink the water. During this time, the citizens of Flint were exposed to lead well above the EPA’s action level. The repercussions of this tragedy for the citizens of Flint cannot be understated. The miscarriage rate in Flint increased precipitously and it is estimated that among the babies conceived from November 2013 through March 2015 “between 189 and 276 more children would have been born had Flint not enacted the switch in water” (Grossman and Slusky 32). Exposure to lead is particularly devastating for children and those exposed will struggle with reduced IQ, behavior problems, lack of impulse control, a reduced attention span, and reduced educational attainment. The lack of corrosion control not only increased levels of lead in the city’s drinking water, but also made chlorinating the system difficult. This led to a spike in Legionnaire’s disease during the switch that sickened an estimated 79 individuals and killed at least 12. In addition to the aforementioned health effects, the water crisis had a detrimental economic impact as well. Home values decreased, and the corrosive river water damaged not only the city’s water infrastructure, but also many residents’ plumbing, water heaters, washing machines, and dishwashers.

The initial failure to add corrosion control to the city's water was a mistake made by officials at the Michigan Department of Environmental Quality, but the removal of democratic citizen participation provided the underlying framework that allowed this initial mistake to go unnoticed for so long. It was a failure of democracy that led to the tragic consequences of the Flint water crisis. The City of Flint had been getting its water from the Detroit Water and Sewerage Department for decades, but, throughout 2012 and 2013, two subsequent emergency managers who had been appointed by the state to direct the financially distressed city decided to build a pipeline from Lake Huron to Flint to save money and use the nearby Flint River, which had been used as a back-up source for decades, as a temporary water source. Many of the citizens were not comfortable using the Flint River, but the emergency managers projected that doing so would save the struggling city \$5 million dollars over the two years it would take to complete the pipeline. They were confident that the city's water treatment facility would be able to do what was necessary to provide the citizens with safe drinking water. Mike Glasgow, Flint's Laboratory and Water Quality Supervisor, however, was skeptical from the beginning about the city's ability to maintain a safe drinking water supply. Emails show that he attempted to persuade the Department of Environmental Quality away from using the Flint River as a water source because he did not feel the water treatment plant was prepared to provide safe water to the city. He explained that, though he had people above him planning to distribute water "ASAP," he needed more time to train staff and update monitoring. He said that he "was reluctant before, but after looking at the monitoring schedule and our current staffing I do not anticipate giving the OK to begin sending water out anytime soon. If water is distributed from this plant in the next couple of weeks, it will be against my direction" (Emails Released by Gov. Rick Snyder). Glasgow doubted he would be listened to but concluded that he would "reiterate this to management above me, but they seem to have their

own agenda.” Glasgow was right. Just eight days after sending this message, the City of Flint switched from the Detroit Water and Sewerage Department to the Flint River.

In the months after the switch, the State of Michigan ignored growing evidence that something was wrong with the water. Residents complained of discolored water that smelled bad and tasted worse. They claimed the water was causing a range of health problems such as hair loss, stomach ailments, rashes, and pet deaths. The city’s water treatment facility issued two boil-water alerts, one for e. coli and another for coliform, and a Water Warning for high levels of trihalomethane, a disinfectant byproduct that can cause liver and kidney damage. The Flint General Motors plant switched from the City of Flint water to Flint Township water citing the fact that the city’s water was corroding their auto parts. An outbreak of legionella--a bacteria carried in water--occurred the year after the switch sickening 97 and killing 9. A local pediatrician, Dr. Mona Hanna-Attisha, identified an uptick in blood lead levels of Flint children that coincided with the water switch. Walters’ home tested extremely high for lead and an EPA employee who was working on the case was so concerned about what he suspected was a danger to public health that he leaked a memo outlining the city’s failure to implement corrosion control treatment and the potential devastating effects. There were numerous signs that something was wrong with the water. Despite mounting evidence to the contrary, state officials, the Michigan Department of Environmental Quality, the Environmental Protection Agency, and the Department of Health and Human Services continued to assure the citizens of Flint that their water was safe to drink. With no locally elected officials and with state agencies brushing off their concerns, the citizens had nowhere to turn.

The promise of democracy is that citizens are allowed make collective choices about policies and institutions that affect society and, in so doing, have a direct role in determining their

shared future. This dissertation argues that to participate in democracy individuals must have an opportunity to speak and be heard, to persuade other citizens, representatives, and officials—opportunities the citizens of Flint were not allowed. This dissertation explores the Flint water crisis through the lens of the debate between John Dewey and Walter Lippmann about the extent to which citizens should participate in decision making. The Flint water crisis is the ideal site for such exploration as it highlights the tragic consequences possible when citizens are not provided with meaningful opportunities to participate in democratic decision making. This dissertation will analyze the citizens' struggle to have their voices heard in the events leading up to and during the exposure of the Flint water crisis and in so doing strives to better understand the ways people engage rhetorically in the collaborative project of living a democratic life with others. To this end, it is interested in the ways citizens are silenced, the reasons for this silencing, and the ways that citizens work to have a voice within democratic institutions. It explores the roles of experts and citizens within democracy and the ways that experts and citizens can come together to work for a common cause. Throughout, it recognizes that working together is not easy and is often fraught with tension. Such rhetorical work is important because in democracy there are few powers greater than that of setting the terms of communication to determine what can be discussed and who can participate in the discussion.

The following section establishes that emergency management made it particularly difficult for the citizens of Flint to participate in democratic discussions about the city's water quality or to compel officials to listen to their concerns about the water quality. This section argues the communication available to citizens during the events leading to the water crisis was not the give and take of democratic communication, but one of assertion and dominance that precluded citizen participation in decision making about the city's water quality and safety. The chapter

concludes with an overview of the Dewey/Lippmann debate—the theoretical foundation for the project.

Emergency Management and the Removal of Citizen Participation

Within months of the water switch, many residents' tap water turned brown and they received a notice stating that the Trihalomethane levels in the city's drinking water had exceeded federal safety standards. In response to the alert, the city invited residents to attend a town hall meeting about the water quality and safety. If, however, residents hoped the meeting would provide them with an avenue to express their concerns about the water quality or persuade the city to switch back to the Detroit Water and Sewerage Department they were bound to be disappointed. The purpose of the meeting was not to gather information from residents, but, according to Howard Croft, the Department of Public Works Director, in the press release the press release, was to let residents, businesses, and visitors of Flint know "that the water in Flint is safe and that we are working every day to make improvements to our system to ensure that. Our goal is to make sure we get people the information on our efforts and assure them that we are on the right track with them" (Fonger "City of Flint Says Wednesday Meeting Will Detail Efforts to Provide Safe Drinking Water"). Croft arranged for a panel of experts including representatives from the Genesee County Drain Commissioner's office, the Department of Environmental Quality, and LAN engineering, Utilities Administrator Daugherty Johnson, and a microbiology professor from nearby Michigan State University to provide information to the residents to convince them their water was safe. The goal of the meeting was not to take citizens' input but to convince them that the authorities were taking care of the situation and that their drinking water was fine.

Croft had his work cut out for him. Many citizens in Flint were concerned about the discolored tap water and their recent, unexplained, health problems. Citizens had been complaining

about discolored, foul tasting water since almost immediately after the switch. They were upset that they were paying some of the highest prices in the nation for water that, at worst, was making them sick and, at best, tasted awful. Hundreds of concerned citizens joined together with local pastors to organize groups to protest the water quality. Concerned citizens protested at council meetings, held community rallies, marched through downtown holding jugs of discolored water and signs, hosted water giveaways, and set up Facebook pages as public forums for complaints and concerns. The protests became even more urgent when the local General Motors plant petitioned the city to switch to Flint Township water citing the fact that the Flint River water was corroding its auto parts. Councilwoman Monica Galloway expressed her concern that this “is just another thing that says to me (that) we are like guinea pigs [...] It’s like a research project [...] that we would normally do on rats” (Fonger “GM’s Decision to Stop Using Flint River Water Will Cost Flint \$400,000 per Year”). The citizens of Flint, a financially distressed black-majority city, suspected the state was not concerned about the poor water quality because of the city’s racial and economic demographic.

The City of Flint, a so-called rust belt or deindustrialized city, and the State of Michigan have had a hostile relationship for decades. Long before the ongoing Flint water crisis, the City of Flint had been a bustling manufacturing city second only to Detroit. At its peak in 1960, the population of Flint was just under 200,000 and in 1978 80,000 people worked at GM’s Flint plant, the largest employer in the area. As the auto industry moved elsewhere, however, this steadily declined and by 2010 GM employed just under 8,000 people. As its major source of employment dried up, unemployment rates soared, home values plummeted, and by 2010, the city’s population had fallen to just over 100,000, half of what it had been at its peak. Throughout the decades of its decline, the City of Flint and the State of Michigan became locked into disagreement about who

should pay for essential services that the city could increasingly no longer afford. The citizens of Flint, 57% of whom are black and a stunning 42% of whom live in poverty, argue that the state ignores their plight. For its part, the state often figures the citizens of Flint as responsible for their own predicament and as constantly looking for unreasonable handouts.

Soon after the exposure of the water crisis, Governor Snyder released the emails that were sent to him—but not those that he sent—that pertained to the events leading up to the crisis. These emails lend support to citizens who claimed that racial and class bias led the State of Michigan to not listen to them. The emails show that the state was predisposed to brush off the citizens' concerns and interpret them not as genuine but as attempts to get money from the state. Dennis Muchmore, Governor Snyder's then chief-of-staff, sent Governor Snyder an email on September 25th, 2015, just weeks before the exposure of the water crisis, explaining that the Department of Environmental Quality and the Department of Community Health “feel that some in Flint are taking the very sensitive issue of children's exposure to lead and trying to turn it into a political football claiming the departments are underestimating the impacts on the populations and particularly trying to shift responsibility to the state.” He went on to say he could not “figure out why the state is responsible” and added that residents were caught up in a “swirl of misinformation and long term distrust of local government unlikely to be resolved” (Emails Released by Gov. Rick Snyder 74) The following day, Muchmore sent another email to Governor Snyder, this time explaining that “we have the anti-everything group turning to the lead content, which is a concern for everyone, but DEQ and DHHS and EPA can't find evidence of a major change [...] Of course, some of the Flint people respond by looking for someone to blame instead of working to reduce anxiety.” (Emails Released by Gov. Rick Snyder 73) These emails show that the immediate response of the state and its agencies to the suggestion that there were high lead levels was to

dismiss the citizens and their protest groups and to shift blame from the state to the city. Much more and the directors of the Michigan Department of Environmental Quality, Michigan Department of Health and Human Services, and EPA did not take citizens' concerns over water quality seriously because they fell into the grooves of the well-worn narrative of responsibility shuffling between the city and state. They dismissed concerned citizens as being manipulated by activists and organizations—the “anti-everything group”—who, they believed, were capitalizing on the citizens' concern to help build a self-serving case that the state was responsible for taking care of the problems with the water.

The January 21st town hall meeting is an excellent example of the failure of democratic practices that provided the underlying framework that allowed the Flint water crisis to occur. Croft, tasked with using the meeting to inform concerned and increasingly angry citizens that their water was safe despite the connections they were making between their health concerns and the water, was determined not to allow the protestors room to gain ground. He tightly controlled the terms of communication to deny citizens an opportunity to engage in dialogue with the panel that could possibly veer from the message that the authorities were taking care of the problem and that the drinking water was safe. Croft opened the meeting by explaining the terms of communication to the 150 concerned citizens crowded into the town hall, many of whom were carrying signs and jugs of discolored water. The meeting would begin, he explained, with each member of the panel introducing themselves and informing the audience about the quality and safety of the water. When the panel was done speaking, the citizens would be given a chance to write down questions on a piece of paper that would be given to the appropriate panel member to respond to. The police who lined the walls of the room, Croft explained, were there to step in at the first sign of disorder. He would shut the meeting down, he threatened, at the first sign of disorder from the audience.

Video recording of the meeting shows that the citizens sat patiently through the panel's presentation but grew frustrated with their inability to interact with the panel during the question and answer session. Having to write down their questions and turn them in to be answered by a panel member severely limited the citizens' ability to say what they had come to say. Many in the audience wanted to make a comment not ask a question. One man, for example, went against Croft's procedures and stood to directly address the panel to tell them about the health problems he was seeing in the dogs he helped train as a volunteer for disabled veterans. He wanted to point out this was a problem and ask if anyone was keeping track of what in his experience was a high number of dogs who were having seizures and were dying from unexplained causes. His purpose for coming to the meeting was not to be assured that the water was safe, but to convince the experts who could do something to fix the problem that there was something wrong. He had first-hand information he felt the experts should know about and he wanted to communicate that to them. Croft, however, repeatedly admonished the audience for their interruptions and insisted that they write down their questions and pass them in according to the procedures he had outlined at the beginning of the meeting. By limiting citizens to asking questions those who wanted to provide evidence about the problems with the water were not able to make their point. The question format forced them into a position where they could not contribute but, instead, could merely receive assurances from the officials and experts that although the "aesthetics" of their water was poor it was perfectly safe. Insisting that the questions be written down on paper did not allow for the questioner to respond and worked to ensure that the panel members would have the last word. As more and more citizens eschewed the question format and stood to speak to the panel and to the audience, Croft made good on his threat and shut the meeting down.

The point of town hall meetings, traditionally, is to provide elected officials with an opportunity to hear from and connect with their constituents. These meetings are informal and are not governed by a particular set of procedures and, as such, can be formatted in a variety of ways. The format of the January 21st Town Hall Meeting about Flint's water quality did not allow citizens to express their opinions or share their knowledge with officials and experts. Claire McClinton, a citizen who attended the meeting, summed up what many who were in attendance no doubt felt: "This was, as far as coming to a solution, a total waste of time. [...] (Fonger "Officials Say Flint Water is Getting Better, but Many Residents Unsatisfied"). Indeed, the town hall meeting was never intended as a democratic opportunity for citizens and experts to come to a solution. The meeting was organized to avoid citizens' input and ensure a one-way flow of information from expert to citizen.

The Dewey/Lippmann Debate

The debate that occurred between John Dewey and Walter Lippmann throughout the 1920s is generative for current theories of technical and professional communication. At the heart of the debate is a concern about the extent to which citizens should be involved in the myriad technical issues brought about through modern industrialization. As Dewey points out,

the questions of most concern at present may be said to be matters like sanitation, public health, healthful and adequate housing, transportation, planning of cities, regulation and distribution of immigrants, selection and management of personnel, right methods of instruction and preparation of competent teachers, scientific adjustment of taxation, efficient management of funds, and so on. These are technical matters, as much so as the construction of an efficient engine for purposes of traction or locomotion. (124-125)

Decision making was highly technical in a way that it was not in previous generations. Democratic theories that claim that all individuals have the capacity to participate in decision making were developed when rural, agrarian society predominated, and public issues were less technical and easier for citizens to understand. Lippmann believed that because citizens can no longer

understand the vast number of important issues confronting society officials must turn to experts for the information upon which to make decisions. Dewey, however, disagreed. According to Dewey, citizens could not be left out of decision making about technical issues as it was only by working with citizens that public issues could be identified. The question about the extent to which citizens should be involved in decision making and the best way to include them is one that has gained increasing traction in technical and professional communication over the past twenty years. Turning to Dewey's response to Lippmann highlights that citizen participation is not just a matter of justice but is an important aspect of decision making.

Both Dewey and Lippmann agree that the problem with democracy arises with modern industrialized society's increase in technical information and concomitant proliferation of publics, each with its own agenda, issues, and ways of expressing its interests. Lippmann points out that, despite the narrative of citizen participation, the truth of democracy is that policymaking and problem-solving are done by political insiders while the average citizen has little say. Citizens' input is, for the most part, limited to the right to vote which, Lippmann claims, does not provide citizens with a genuine opportunity to participate. Within contemporary democracies, the truth of the matter, Lippmann points out, is the citizen goes

to the polls, receives a ballot on which a number of measures are printed, almost always in abbreviated form and, if he says anything at all, he says Yes or No. The most brilliant amendment in the world may occur to him. He votes Yes or No on that bill and no other.

You have to commit violence against the English language to call that legislation. (*Public Opinion* 231-232)

Far from criticizing the fact that citizens do not have a real role in governing, however, Lippmann contends this is the way it should be. Lippmann is critical of any model of democracy that places

power in the hands of the public. To be involved in decision-making, Lippmann believes a citizen would have to be “omnicompetent,” that is, he would have to know the details about a wide variety of moral and political issues to participate in decision-making. However, as Lippmann makes clear, this is an impossible task. The average citizen

cannot know all about everything all the time, and while he is watching one thing a thousand others undergo great changes. Unless he can discover some rational ground for fixing his attention where it will do the most good, and in a way that suits his inherently amateurish equipment, he will be as bewildered as a puppy trying to lick three bones at once. (*The Phantom Public* 15)

Citizens, Lippmann believes, should not have a say in decision-making because they do not have the expertise needed to make well-informed decisions. Lippmann promotes a limited democracy in which elected officials base their decision on information given to them by experts rather than on the citizens’ will. Citizens, then, under Lippmann’s proposed system would continue to vote for representatives, but those representatives would look to experts for the information upon which they made decisions rather than to the people.

Lippmann’s configuration takes expert information into account in decision-making but does so at the expense of citizen participation. Non-experts, Lippmann is convinced, must be left out of decision-making because they have no sense of objective reality and base their opinions and beliefs on self-interest and bias. This was not a fault of citizens, but is, according to Lippmann, a fundamental aspect of human nature. Lippmann, who coined the word “stereotype,” argues that individuals have no way of understanding events they do not know much about or have not experienced first-hand so must use subjective knowledge to make sense of the situation. Far from being an accurate reflection of reality, this leads to the creation of stereotypes that are inflected by an individual’s cultural experiences and beliefs. Lippmann argues there is no way to get away from stereotyping because they are necessary to allow people to form an understanding of the vast

number of experiences and issues with which they do not have direct knowledge. Lippmann claims it is impossible to eradicate stereotypes as

a people without prejudices, a people with altogether neutral vision, is so unthinkable in any civilization of which it is useful to think, that no scheme of education could be based upon that ideal. Prejudice can be detected, discounted, and refined, by so long as finite men must compress into a short schooling preparation for dealing with a vast civilization, they must carry picture of it around with them, and have prejudices. (*Public Opinion* 120)

The average individual, according to Lippmann, must rely on stereotypes and incomplete knowledge to make sense of the world.

Experts are important, Lippmann argues, because, unlike the average individual, they can perceive the world as it really is. Experts must be made central to decision-making as they are the ones who are able to understand the problems that can at best only be dimly perceived by citizens and officials. The job of experts, then, is to bring those problems to the attention of officials who can then make good decisions. According to Lippmann's configuration, an entire host of experts would be needed to examine the intricacies and complexities of public issues. Lippmann saw new promise in the turn of the century's rise of professionalization and expertise and with the way that "with varying degrees of skill and honesty distant complexities are reported every day by engineers and accountants for business men, by secretaries and civil servants for officials, by intelligence officers for the General Staff, by some journalists for some readers" (261). In his mind, experts will allow political decision making to move away from the speculation of the self-centered man "who had to see the whole world by means of a few pictures in his head" (262). Lippmann's model government, then, figures the expert as the one who makes sense of the world's problems, but does not put policy into action. Doing so, Lippmann believed, would compromise his "disinterested" judgment. According to Lippmann, "the power of the expert depends upon separating himself from those who make the decisions, upon not caring, in his expert self, what decision is made" (382).

Becoming directly involved in decision-making would, Lippmann warns, discount that person as an expert.

Dewey, in his response to Lippmann, agrees about the current problems confronting democracy but disagrees that democratic participation should be relegated to experts and government officials. While he agrees with Lippmann that the public was not currently capable of democratic participation, Dewey argues that rather than abandon this ideal we needed to work toward creating a society that would equip citizens to engage in democratic processes of decision-making. Dewey takes issue with Lippmann's assumption that individuals must be well-informed about a topic to participate in decision-making. According to Dewey, it is a critical, reflective habit of mind that fitted an individual to participate in decision-making not technical knowledge.

Dewey conceives of knowledge differently than did Lippmann. He does not believe knowledge is an accumulation of facts gathered by an individual, but instead that knowledge is built in "association and communication; it depends upon tradition, upon tools and methods socially transmitted, developed and sanctioned. Faculties of effectual observation, reflection and desire are habits acquired under the influence of the culture and institutions of society" (*The Public and Its Problems* 158). Knowledge, in other words, according to Dewey, is socially constructed. This is important to Dewey in a way that it was not important to Lippmann because, for Dewey, democracy is more than a political practice. The process of coming to knowledge through social communication and interaction was, for Dewey, at the very heart of democracy. While Lippmann claims that experts are needed to identify issues of concern to the public and to bring these issues to an official's awareness, Dewey suggests that what is an important public issue is socially created and, as such, cannot be simply uncovered by experts. Dewey points out that

while singular beings in their singularity think, want and decide, *what* they think and strive for, the content of their beliefs and intentions is a subject-matter provided by association.

Thus man is not merely *de facto* associated, but he *becomes* a social animal in the make-up of his ideas, sentiments and deliberate behavior. *What* he believes, hopes for and aims at is the outcome of association and intercourse. (24-25)

Not allowing people to participate in this social construction of knowledge, Dewey suggests, goes against our fundamental nature. As Dewey points out, the social construction of knowledge is inherent in natality. The older generation passes its knowledge and wisdom on to the next generation and, in so doing, contributes to the democratic construction of society. The crisis with democracy, however, is that modernity obscures the ways people are associated with one another and the ways we can build knowledge together. Rather than accept this as the way things are, like Lippmann, Dewey suggests we need to create more opportunities for citizens to participate in inquiry about the nature and remedies of social problems. The way to solve the problems with democracy, according to Dewey, is not less democracy but more.

Dewey and Lippmann fundamentally disagree about the kind of knowledge required of citizens in a democracy and the ability of the average citizen to acquire this knowledge and competence as well as the role of experts. Dewey argues experts should not act independently of society but should, instead, be guided by the public. The role of the expert in Dewey's configuration is to enlighten the public not, as Lippmann saw it, to provide officials with the information they needed to make decisions about the public good. Lippmann suggests experts are important because they are the only ones who can distance themselves from public issues and remain objective. Dewey, however, argues that only the public can identify its needs and that experts must listen to the people as "the man who wears the shoe knows best that it pinches and where it pinches, even if the expert shoemaker is the best judge of how the trouble is to be remedied" (207). A class of experts who inform officials, Dewey suggests, would be completely inadequate to the task. In Dewey's mind an informed public is not one comprised of

omnicompetent individuals but is instead comprised of individuals who can listen and communicate with one another to work together toward developing solutions to society's problems. Indeed, Dewey figures communication as central to democracy and claims the central need "is the improvement of the methods and conditions of debate, discussion, and persuasion. That is *the* problem of the public" (208). Not only do arguing, debating, and persuading one another about political issues help citizens come to an understanding about a problem but it will, Dewey believes, lead to a society of individuals who are aware of the fact that they are associated with others and must work together. Once people understand that the goal is not to exert their will over others, but to work together to attain a goal and discuss and debate how best to do so, society will arrive at an understanding of what its interests are. According to Dewey, however, this can only be achieved when citizens are allowed to participate and are given opportunities to communicate with one another.

Chapter Descriptions

The Flint water crisis is the ideal site to explore the debate between Dewey and Lippmann about the extent to which citizen participation should be included in democratic decision making. During the events that led to the Flint water crisis, citizens were removed from the decision-making process to an unprecedented extent. Placed under emergency management, the citizens of Flint had virtually no opportunities to compel officials to take their concerns about the water seriously. State officials could ignore citizens' concerns and listen exclusively to experts in a way that they could not have done if their locally elected officials had remained in control. This dissertation examines the events surrounding the Flint water crisis through the lens of the Dewey/Lippmann debate and, in so doing, aims to develop rhetorical practices that contribute to the development of a democratic culture that requires experts, officials, and citizens to work together to make decisions

about the public good. It is my hope that this project will help to contribute to the improvement of democratic communication that is needed to prevent future tragedies like the Flint water crisis.

Chapter 2

This chapter explores Michigan's so-called Emergency Manager Law to better understand the dichotomy the Dewey/Lippmann debate sets up between citizen participation and the reliance on experts. Michigan's Emergency Manager Law enacts Lippmann's view that citizen involvement in decision making should be curtailed. The effect of the law is to silence the citizens of financially distressed cities, the majority of whom are African American and/or live below the poverty line. While many states have a law that allows for a financial expert or board to oversee financial decisions in financially distressed cities, Michigan's Emergency Manager law is one of the most aggressive of its kind. When the governor appoints an emergency manager to a city in Michigan, the powers of the locally elected officials are removed and subsumed by the emergency manager. An emergency manager is given even broader powers than the locally elected officials. They can unilaterally cut budgets, eliminate jobs, reduce or restructure services, trim retirement benefits, raise taxes, sell assets, incorporate cities and school districts. The main purpose of the law is to remove avenues for democratic decision making to, instead, allow an appointed financial expert to make decisions unencumbered by the citizens' wishes. In doing so, it allows emergency managers unprecedented (and unchecked power) and leaves the citizens with no locally elected representatives. Emergency management interrupts typical democratic avenues—such as democratic representation, voting, petitions, attending meetings, writing letters—for citizens to participate in decision making. This chapter argues that the Flint water crisis is an example of the tragic outcomes possible when citizen participation is removed from decision making and that the law must be revised.

Chapter 3

This chapter examines the role of scientific validation in the Flint water crisis by analyzing one citizens' mobilization of the persuasive force of scientific validation to convince local and state officials something was wrong with the city's water. LeeAnne Walters, a stay-at-home mom with a high school diploma, was the first to figure out that corrosion control was not being added to the water and this was causing lead to leech from aging pipes into the city's water supply, but because citizens' personal experiences and observations are not accepted as sufficient proof of water contamination, the only way she could compel officials to take action was to recruit the help of a civil engineering professor to perform a large-scale analysis of the city's water. While Walters was ultimately successful in exposing the lead in water crisis in Flint, it took her over a year to prove to state and local officials what she and other concerned citizens already knew—the city's water was not safe to drink. This chapter traces the way that scientific validation exerted a near monolithic persuasive force in the recognition of and response to Flint's contaminated drinking water. In exploring the citizen/expert relationship between Walters and Edwards, this chapter argues that while enlisting the help of an expert successfully exposed the crisis it also undercuts the narrative of citizen participation and reinforces the faith in scientific expertise that led to the crisis in the first place. This chapter argues Dewey's ideal of the democratic citizen/expert relationship offers a more effective model that integrates personal and observational knowledge with experts' scientific and technical knowledge.

Chapter 4

This chapter will analyze the *Final Report* of the Flint Water Advisory Task Force to argue that the form of the report obscures the full extent of the State of Michigan's role in the water crisis. This analysis of the *Final Report* is grounded in the understanding that reports for decision

making mediate thinking and guide inquiry. This chapter argues the form of the *Final Report* guided the task force's inquiry and led it to provide recommendations for each agency/entity that was responsible for the crisis and, in so doing, obscured the extent to which the State of Michigan's removal of checks and balances provided the underlying framework for the crisis. This chapter begins with a discussion of the context surrounding the Flint Water Task Force's inquiry and to which the *Final Report* contributes. This chapter then analyzes the form of the *Final Report* to argue that the task force, guided by the charge to identify the ways various agencies/entities contributed to the Flint water crisis prevented it from developing findings and recommendations that adequately addressed the democratic failures that allowed the crisis to occur. This chapter concludes with a call for technical communication courses to emphasize participatory criteria along with managerial, technical, and social criteria as a way to modify the form of reports for decision making to ensure more adequate findings and recommendations in the future.

Chapter 5

This project concludes by builds upon the previous chapters by arguing that Dewey's concept of democratic communication provides a useful heuristic for developing democratic communicative practices that allow citizens and technical/scientific experts to communicate with one another about technical issues such as water quality and safety. This chapter reflects on what I can do within my own institutional position to work toward promoting democratic communicative practices. First, I will argue that grounding activist-oriented theories of institutional critique in materialist theories will allow for more meaningful citizen participation. I will then discuss pedagogic practices that serve to promote Dewey's democratic communication. This reflection is intended to be generative rather than exhaustive and, I hope, will prompt others

to reflect upon what they can do within their own institutional positions to work toward the democratic communication necessary to prevent future tragedies like the Flint water crisis.

CHAPTER 2 “EMERGENCY MANAGEMENT: THE FRAMEWORK FOR THE FLINT WATER CRISIS”

When LeeAnne Walters became suspicious that the city’s water was causing her family’s unexplained health problems her first response was to take her concerns to the City Council. The Flint City Council was sympathetic to Walters and to other citizens who expressed concern about the discolored, foul tasting water that began to flow from their taps shortly after the city switched from the Detroit Water and Sewerage Department to the nearby Flint River. The City Council held special town hall meetings to allow citizens a chance to voice their concerns about the connections they were seeing between the poor water quality and their unexplained health problems. In March 2015, seven months before the exposure of the water crisis, Councilman Eric Mays forwarded a proposal to switch back to the Detroit Water and Sewerage Department. Mays explained his proposal was prompted by the fact that “people in the community asked me to make this motion.” According to Mays, it was time the City Council did something about the poor water quality as “residents have suffered too long.” The City Council voted 7-1 to “do all things necessary” to return to the Detroit System. Mays hoped the motion would trigger a special meeting between the City Council, Ambrose, Mayor Walling, the Detroit Water and Sewerage Department, and the state to develop a plan to switch back to the Detroit Water and Sewerage Department but he had no such luck. Jerry Ambrose, the state-appointed emergency manager immediately rejected the proposal claiming that

Flint Water today is safe by all (U.S. Environmental Protection Agency) and (Michigan Department of Environmental Quality) standards and the city is working daily to improve its quality. It is incomprehensible to me that (seven) members of the Flint City Council would want to send more than \$12 million a year to the systems serving Southeast Michigan, even if Flint rate payers could afford it. (Lake Huron) water from Detroit is no safer than water from Flint. (Fonger “Emergency Manager Calls City Council’s Flint River Vote ‘Incomprehensible’”)

The city's locally elected officials may have been willing to listen to the citizens, but emergency management stripped them of the power to act on the citizens' behalf. Ambrose vetoed the City Council's vote and insisted the city would continue to get its water from the Flint River. If the City Council's vote had been allowed to stand, Flint would have switched back to the Detroit Water and Sewerage Department and the extent of the crisis would have been limited.

Ambrose, an unelected official, had the power to make unilateral decisions about the city's drinking water and did not have to listen to the City Council or the citizens. In Michigan, the appointment of an emergency manager to a city removes power from locally elected officials and gives it, instead, to a financial expert appointed by the governor whose job is to balance the city's budget not represent the best interests of the citizens. Because emergency management removes locally elected representation, it blocks the avenues typically available for citizens to effect change. Emergency management leaves citizens with virtually no way to force officials to listen to them or to address their concerns. Michigan's emergency manager law dictates that when an emergency manager is appointed to a city the powers of the elected officials—the mayor and council members—are immediately suspended and subsumed by the appointed emergency manager. The emergency manager can restore some or all of those powers but doing so remains at the discretion of the emergency manager. Furthermore, Michigan's emergency manager law affords vastly more power to an emergency manager than to a mayor or city council. An emergency manager can unilaterally eliminate local ordinances and laws, sell city assets, modify or break collectively bargained contracts, consolidate or dissolve municipalities, and recommend to the governor that a community file for bankruptcy.

The appointment of an emergency manager is limited to eighteen months and proponents of the law figure the removal of locally elected officials as a quick way to get a financially

distressed city back on track. The idea is that financial managers will only need eighteen months because working without having to consult others allows them the freedom to apply their expertise in a way that would not otherwise be allowed. The reality of emergency management, however, has been quite different. While each individual emergency manager is limited to an eighteen-month term, the law does not cap the number of times a city is placed under emergency management. The result has been that nearly all of the school districts and municipalities that have been placed under emergency management in Michigan have had multiple subsequent emergency managers. The emergency management of the City of Highland Park, for example, lasted nine years, from 2000-2009, while the Detroit Public School District was under the emergency management for seven years from 2009 to 2016. Highland Park Schools was under emergency management from 2012-2018, Ecorse from 2009-2013, Muskegon Heights School District from 2012-2016, and Pontiac from 2010-2013. The cities of Flint and Hamtramck have moved in and out and back in to emergency management under multiple emergency managers throughout the last sixteen years. While proponents of the law claim emergency management's removal of locally elected representation is temporary, citizens often lack representation for much longer than the eighteen-month limit suggests.

This chapter analyzes the debate between John Dewey and Walter Lippmann about the extent to which citizens should be involved in decision making through the lens of Michigan's controversial emergency manager law, which removes power from locally elected officials and gives it to an appointed financial expert who is allowed to unilaterally oversee the day-to-day running of a city. The Flint water crisis, this chapter argues, highlights the tragic consequences possible when citizens are removed from the decision-making process and establishes the need to revise Michigan's controversial emergency manager law to provide space for citizen participation.

The section that follows provides background information about Public Act 436, Michigan's controversial current emergency manager law, and how the law has evolved over the years to take its current form. In so doing, this section establishes that an integral facet of the current law is the temporary removal of democratic participation that allows a financial expert to work unencumbered. The subsequent section establishes that the logic behind emergency management is similar to Lippmann's in that proponents of Michigan's emergency manager law believe it is necessary to remove democratic participation to allow experts to unilaterally address the problems plaguing Michigan's deindustrialized city. This chapter concludes by building upon Dewey's argument that experts cannot uncover problems affecting society without citizen input and arguing that Michigan's emergency manager law must be revised to allow for democratic communication between citizens, experts, and officials.

The Development of Michigan's Emergency Manager Law

Over the years, Michigan's controversial emergency management law has evolved to increasingly afford emergency financial experts more power in the day-to-day running of a city and to sideline citizen participation. Michigan's original emergency manager law, Public Act 101 of 1988, allowed the state to perform financial reviews of local governments to identify financial distress and, in cases where it was deemed necessary, appoint an emergency financial manager to take control of financial decisions. Pursuant to Public Act 101, the City Council and Mayor retained their power over the day-to-day running of the city and the emergency financial managers and locally elected officials had to work together to solve financial problems. This act was soon replaced by Public Act 72 of 1990, named the Local Government Fiscal Responsibility Act, which expanded emergency management to school districts as well as municipalities. The law was primarily concerned with preventing units of local government from declaring

bankruptcy. As Section 141.1202 of Public Act 72 explains, the legislature determined

that the public health and welfare of the citizens of this state would be adversely affected by the insolvency of units of local government, including certain school districts, and that the survival of units of local government is vitally necessary to the interests of the people of this state to provide necessary governmental services. The legislature further determines that it is vitally necessary to protect the credit of the state and its political subdivisions and that it is a valid public purpose for the state to take action and to assist a unit of local government in a fiscal emergency situation to remedy this emergency situation by requiring prudent fiscal management. The legislature, therefore, determines that the authority and powers conferred by this act constitute a necessary program and serve a valid public purpose.

Emergency management was developed out of a concern for the public health and welfare of citizens. While Michigan's economy was doing well, there was little need to invoke Public Act 72 and the state appointed only one emergency manager—to the City of Hamtramck—between 1988 and 2000. As Michigan's economy began to sour, however, the state turned to emergency management and expanded upon the power of its emergency managers to help solve its problems with its financially distressed former manufacturing cities.

Michigan's economy, historically tied to the automotive industry, had been experiencing a steady decline since the 1990s as General Motors and other automotive factories moved operations overseas. As the automotive factories left, the unemployment rates in Michigan's manufacturing cities grew, the populations declined, and property values decreased. Going into the 2008 recession, Michigan's unemployment rate was already the highest in the country at 7% and many of its former manufacturing cities were already feeling the wear of a decade of decline. The 2008 recession plunged Michigan into further financial distress and by 2009 the state's unemployment rate peaked at nearly 15%. Michigan's economy was, understandably, the primary focus of the 2010 gubernatorial race. The Republican candidate, Rick Snyder, a venture capitalist and former

Gateway computer executive campaigned as a “tough nerd” who, unlike his career politician opponents, had experience in growing business and creating jobs in the private sector. He promised to do the same for Michigan by providing pragmatic, businesslike leadership when elected. Upon election, Governor Snyder remained true to his word and immediately focused on Michigan’s economy. One of Governor Snyder’s first orders of business was to revise Michigan’s emergency manager law, which he saw as essential for revitalizing Michigan’s struggling cities. Just four months after taking office, Governor Snyder unveiled a new emergency manager law, Public Act 4, that gave the state and its appointed emergency managers significantly more power than did Public Act 72. Unlike the previous emergency management law, Public Act 4 dictated that when an emergency manager was appointed to a city, the powers of the elected officials--the mayor and council members--were immediately suspended and subsumed by the appointed emergency manager. The emergency manager could restore some or all of those powers but doing so remained at his discretion. In other words, pursuant to Public Act 4 the emergency manager’s powers were no longer strictly limited to the financial running of the city but were extended to cover the day-to-day running of a city as well. Pursuant to Section 141.1549 of Public Act 436, Michigan’s so-called emergency management law,

upon appointment, an emergency manager shall act for and in the place and stead of the governing body and the office of chief administrative officer of the local government. The emergency manager shall have broad powers in receivership to rectify the financial emergency and to assure the fiscal accountability of the local government and the local government’s capacity to provide or cause to be provided necessary governmental services essential to the public health, safety, and welfare. Following appointment of an emergency manager and during the pendency of receivership, the governing body and the chief administrative officer of the local government shall not exercise any of the powers of those offices except as may be specifically authorized in writing by the emergency manager or as otherwise provided by this act and are subject to any conditions required by the emergency manager.

Emergency managers, under Public Act 4, are afforded vastly more power than a mayor or a city council. Without having to put it to a vote, as an elected official would have to, emergency managers can eliminate local ordinances and laws, sell city assets, break collectively bargained contracts, consolidate or dissolve municipalities, and recommend to the governor that a community file for bankruptcy. Emergency management allows a single individual to prioritize financial concerns above all else and to unilaterally make decisions about the running of a city while leaving citizens with no representation at the local level and with no opportunities to participate in decision making.

Public Act 4 was immediately met with the criticism that removing elected officials from their duties was a suspension of democracy and an overreach of the state. Many likened emergency management to dictatorship. Within months of its unveiling, a group called Stand Up for Democracy gathered enough signatures for a referendum to put Public Act 4 to a vote where the people of Michigan narrowly overturned the act. Just a month after voters overturned the law; however, legislators the treasurer's office and Governor Snyder passed Public Act 436 of 2012. Upon unveiling the new act, Governor Snyder claimed, "this legislation demonstrates that we clearly heard, recognized and respected the will of the voters [... by building] in local control and options while also ensuring the tools to protect communities and school districts' residents, students, and taxpayers" (Oosting). Despite Governor Snyder's claims, however, the new act essentially restored the powers of Public Act 4 and to some extent extended them even further. While the new act, unlike the previous one, allowed local governments to choose between four options after a state financial review board declared a fiscal emergency, these local control options (mediation, bankruptcy, consent agreement, and emergency management) essentially ask school districts and municipalities to pick their own poison. Doing nothing is not an option and all the

choices lead to emergency management if the state decides the budget is not on track at the end of one year. Far from recognizing and respecting the will of the public who voted to repeal Public Act 4, the lawmakers displayed a blatant disregard for the will, and the vote, of the citizens and put mechanisms into place to prevent the citizens from being able to repeal the law again. Having learned their lesson from the repeal of Public Act 4, Governor Snyder and the state lawmakers included an appropriation that made the new law immune to referendum. This means that, for better or for worse, Public Act 436 is here to stay until the Governor and the state legislators decide otherwise.

Many states have some version of a law that allows for emergency management during times of financial crisis. New York City, for example, was overseen by a financial review board when it was facing bankruptcy in the late 1970s as is the financially distressed city of Philadelphia currently. Michigan's law, however, is unique in the number of cities and school districts that have been placed under receivership and the way it closes off potential avenues for citizens to have a say in decision making to allow for a single financial expert to work unencumbered. Proponents deem this a critical aspect of the law and are adamant that without being able to take power away from elected officials and allowing an appointed financial expert to work unencumbered very little can be done to address financial crisis. When Al Pscholka, the Representative who drafted Public Act 4, was asked what prompted him to change Public Act 72 in the first place, for example, he explained the previous law did not give the emergency manager unilateral power and so

did nothing more than let people [i.e., emergency managers] manage the decay. They had no power to do anything. They couldn't make any changes and the communities would have still gone towards bankruptcy. PA 72 didn't provide the tools in order to make the

changes that have helped all of these communities get out of bankruptcy. (*The Griffin Policy Forum*)

Public Act 72 was ineffective, according to Pscholka, because the Mayor and City Council could check emergency managers and prevent them from enforcing the changes they felt were necessary for financial recovery. The “tools” Pscholka believes are necessary is being able to remove power from locally elected officials and giving unprecedented power to a financial expert to allow them to work unencumbered.

Emergency Management and the Dewey/Lippmann Debate

The debate about Michigan’s controversial emergency management law is indebted to the Dewey and Lippmann debate about participation and technocracy. Much like Lippmann, proponents of Michigan’s controversial emergency management law believe only experts can solve the problems facing Michigan’s deindustrialized cities. Indeed, according to Lippmann, citizens should have a limited role in democratic decision making, as it is impossible for any individual to become well-informed enough about the wide variety of moral and political issues in the world to make good decisions. The average individual, he claims, must be left out of decision-making because they have no sense of objective reality and based their opinions and beliefs on self-interest and bias rather than the general good. Experts, on the other hand, must be made central to decision making, Lippmann argues, because they are the only one who can uncover the nature of difficult social problems. Much like Michigan’s emergency manager law, Lippmann’s proposed system is based on the belief that experts are the only ones who can fully comprehend the circumstances.

Lippmann disagrees with those who believe following the will of the people leads to the best decisions. According to Lippmann, representative democracy places too much emphasis on

individual will and the need for citizens to participate in democratic decision making. The root of the problem with representative democracy is, according to Lippmann, that it is based upon a belief that all people have within them the capacity to rule. This belief, Lippmann explains, was developed before our modern, industrialized democracies. According to Lippmann, democratic theories that claim all individuals have the capacity to rule were developed at a point when this was more practical. In the rural, agrarian society in which early democratic theories were developed it was easier for citizens to have a say in the decision-making process. Public issues, Lippmann explains, were at a local not a global level and this allowed individual citizens to become well-informed relatively easily. Modern industrial society is different, Lippmann claims. Citizens can no longer hope to come to an understanding of the increasingly vast number of important issues necessary to have an input in decision-making; they need the help of experts. Lippmann does not see a problem with this and suggests those who do place too much emphasis on individuals' desire to have a direct role in decision-making. According to Lippmann,

it is supposed that the expression of their will is the consuming passion of men, for they are assumed to possess by instinct the art of government. But as a matter of plain experience, self-determination is only one of the many interests of a human personality. The desire to be the master of one's own destiny is a strong desire, but it has to adjust itself to other equally strong desires, such as the desire for a good life, for peace, for relief from burdens. [...] Because the art of successful self-government is not instinctive, men do not long desire self-government for its own sake. They desire it for the sake of the results. (*Public Opinion* 310)

What was most important to citizens, Lippmann argued, was that their needs were met not that they had a chance to participate in decision making. In his mind, technocratic rule was the best way to achieve the general good as this system allowed officials to make decisions that are more representative of the people's will than the current representative democracy. This is because the expert has better access to reality than does the average citizen and represent people "who are not voters, functions of voters that are not evident, events that are out of sight, mute people, unborn

people, relations between things and people. He has a constituency of intangibles” (382). Because experts can access the truth of situations in a way the average citizen cannot, Lippmann believed they would be better at making known what was best for the public than citizens ever could.

Much like Lippmann, proponents of emergency management do not have faith in citizens’ ability to make good choices. According to proponents of emergency management, closing down citizen representation is necessary in situations of extreme financial distress because it is citizens’ poor choices that got cities into financial distress in the first place. According to this logic, the only way to improve financial distress is to bar citizens from having an influence over those who make important financial decisions. Furthermore, proponents of emergency management argue removing power from local representatives and giving it to an emergency manager who is a financial expert makes sense because they are the ones who have the training and experience needed to make the best decisions about the budget. Lippmann’s configuration places experts at the center of decision making and sidelines citizens. Instead of placing citizens and their elected officials at the center of decision making Lippmann insists that “the real sequence should be one where the disinterested expert first finds and formulates the facts for the man of action, and later makes what wisdom he can out of comparison between the decision, which he understands, and the facts, which he organized” (375).

Proponents of emergency management agree with critics that removing democratic representation is not ideal but argue it is a necessary first step toward getting financially distressed cities back to democratic functioning. Pscholka, for example, suggests the problems with financially distressed cities is that their citizens did not vote for the best representatives in the first place. He explains that when the first emergency manager arrived in the financially distressed city of Benton Harbor, he found nine people on the City Council who had

nine Ford Explorers, nine credit cards, nine cell phones. They had a Department of Works with fifty-two people. It had a no bid contract for garbage which meant that the taxpayers paid twice as much in Benton Harbor as they did in St. Joe. They ran the town right to the brink of bankruptcy to the point where every man, woman, and child in that town had \$10,000 worth of debt on their heads. (*The Griffin Policy Forum*)

According to Pscholka, the citizens of Benton Harbor did very little to stem this wastefulness and continued to vote for corrupt council members who were mismanaging the city's budget. Once the emergency manager got the city back on track the citizens, Pscholka explains, began to make more responsible choices and voted for new officials who were not corrupt. According to Pscholka, emergency management disrupts a dysfunctional political situation to pave the way for improved democratic participation. The state does not, however, leave it up to chance that the citizens will vote for officials who will place the city's financial interests first. To ensure that citizens and their elected officials prioritize fiscal well-being, Public Act 436 dictates that cities emerging from emergency management will be overseen by a state financial oversight board for ten years. During this time, a city must have its budgets and spending decisions approved by the board. Public Act 436 ensures that, for a decade after a city has been returned to home-rule, the state rather than the citizens and their elected officials will have the final say regarding most decisions.

Michigan's emergency manager law is motivated by the belief that citizens of financially distressed cities are too irresponsible and ignorant to participate in decision making. The evidence of their inability to make good decisions, proponents claim, is that the citizens and their elected officials allowed their cities to fall into financial distress in the first place. Orr, in an interview with *The Wall Street Journal*, tellingly did not place the blame for Detroit's looming bankruptcy on the loss of manufacturing jobs and the subsequent population decline but, instead, on the fact that "for a long time the city was dumb, lazy, happy and rich" (Finley). Emergency management's distrust of citizen participation intersects with existing narratives about the citizens of financially

distressed cities. A concerning fact of emergency management is that it disproportionately affects people of color; nearly half of the state's African American population have lived under emergency management since the implementation of the law. The fact that so many of the state's African American citizens' locally elected officials were being removed from power led some critics of the law to early on frame emergency management as a civil rights issue. Reverend Wendell Anthony, pastor of Fellowship Chapel and a civil rights activist in Detroit explains

it is the civil rights issue of our time. I didn't vote for an emergency manager. I voted for a mayor. I did not give up my right to vote on the whims and fancies of a law that we believe is unconstitutional and immoral. We view it as another step in the direction of voter suppression and vote oppression. (Thompson)

Congressman John Conyers sent a letter to Attorney General Eric Holder upon the implementation of Public Act 4 requesting a review of Michigan's emergency manager law to see if it violated the 1965 voting act that protects minorities from discriminatory voting practices. In this case, Conyers claimed, "while the law itself may be facially neutral, it would seem that it is being applied in a discriminatory fashion, as the impacted jurisdictions have very high proportions of African Americans and other minorities" (Landon). The law may not have had an explicitly discriminatory intent and was ultimately found to not be in violation of the voting act, but its narrative that citizens of financially distressed cities cannot be trusted to make good decisions builds upon an extensive history of federal and state attempts to prevent African Americans from democratic participation.

Proponents of emergency management are adamant that decision-making in financially distressed cities must rest exclusively in the hands of experts. Shutting off avenues for citizens to have a say in decision-making is necessary in situations of extreme financial distress, proponents claim, because citizens do not have the expertise that is needed to make important financial

decisions. Removing power from locally elected officials and giving it to an emergency manager who is a financial expert, proponents argue, makes sense because they are the ones who have the training needed to make the best decisions about the budget. An added benefit to emergency management, they claim, is that emergency managers are free to do whatever they deem necessary without having to take into account who they may upset in the process because they do not have to worry about getting re-elected. Kyle Orr, the emergency manager of Detroit, acknowledged his unique position in an interview with *The Wall Street Journal* when he explained that he “could care less” about the citizens’ opinions

because most opinions are either informed, under-informed or have another purpose. I’m dealing with the facts and that’s what’s going to drive decision-making. Opinions and elbows everybody’s got. I’m free. I’m not a politician. Opinions matter to politicians because it translates into votes. I’m not running for anything. I don’t have any political ambitions. (Finley)

Orr is right. Because they are not locally elected officials, emergency managers do not have to take the citizens’ needs and desires into account when making decisions that will have a lasting effect on the city. Their appointment frees them from having to take the citizens’ opinions and concerns into account and, instead, allows them to rely solely upon their own expertise to solve a city’s financial crisis.

What is particularly maddening to opponents of emergency management is that emergency management allows the state to insist citizens of financially distressed cities make cuts that will affect their well-being when part of the reason why Michigan’s former manufacturing cities are struggling is because, to balance the state’s budget, Governor Snyder drastically cut the amount of money the state had been giving cities for decades through its revenue sharing program.

Michigan's revenue sharing program is not like other states' in that it allows for the state to determine the amount that will be shared. At the turn of the twentieth century, cities, townships, and villages had a variety of local taxes from which they drew revenue. The State of Michigan, however, sought to eliminate these taxes to implement a state sales tax instead. To entice local units to adopt this, the state set up a revenue sharing program under which a percentage of the sales tax would be given to cities, villages, and townships to help pay for emergency services such as police and fire, maintaining roads, water and sewer services, and garbage collection. The revenue sharing consists of both constitutional and statutory payments. The Michigan Constitution dictates that 15% of the state sales tax will be distributed to cities, villages, and townships and this distribution is based upon population. The statutory portion, however, is determined yearly by the Governor and Legislature. As the state found itself struggling with its own financial problems in 2011, it decreased the amount it shared with cities, villages, and townships to cover its own budget shortfalls. The result is that cities, villages, and townships began to receive much less from revenue sharing than in the decades previous. In 2011, Governor Snyder further limited revenue sharing to financially struggling cities, villages, and townships when he implemented his Economic Vitality Incentive Program (EVIP). Under EVIP the state added requirements for local governments to obtain their statutory revenue sharing payments, wherein local units of government had to comply with three categories—accountability and transparency, consolidation of service, and unfunded accrued liability plan—to receive payments. Cities that do not meet these criteria get none of the statutory revenue sharing. While EVIP is portrayed as an incentive, in practice it penalizes the cities that have not been able to meet these requirements. According to the Michigan Municipal League, Michigan sales tax revenues from 2003 to 2013 increased from \$6.6 billion to \$7.72 billion. During that time, revenue sharing declined from \$900 million a year to around \$250

million. This means that between 2003 and 2013 Detroit missed out on \$732 million in revenue sharing while Flint lost \$54.9 million and Pontiac and Lansing lost more than \$40 million. Critics of emergency management argue the state of Michigan, which currently has a budget surplus, has balanced its budget on the back of its already financially distressed cities.

Proponents of emergency management insist that financial distress is primarily the result of citizens' poor choices and de-emphasize the damage done by decades of de-industrialization, high unemployment, population loss, and loss of state funding. Proponents believe emergency management is fair because it forces financially distressed cities to take responsibility for their own financial difficulties. Proponents of emergency management claim that because citizens and their locally elected officials are the ones who got themselves into financial crisis it is they who must get themselves out. They do not want to "bail out" its financially distressed cities as providing them with state funding, they argue, would reward those who made bad choices and punish those who made good ones.

Democratizing Michigan's Emergency Management Law

The suspension of democratic representation is an important aspect of emergency management, proponents claim, because it allows a financial expert to ignore citizens and focus instead on freely using their expertise to do whatever they deem necessary to solve a city's financial crisis. According to proponents, the benefit of emergency management is that emergency managers are free to make the difficult decisions that elected officials are not. Unlike an elected official, an emergency manager does not have to worry about re-election and can make unpopular but, proponents claim, necessary decisions. Removing the powers of locally elected officials allows financial experts to freely exercise their expertise without having to consult with citizens or their elected representatives. The Flint water crisis highlights the tragic consequences possible

when experts are allowed to make unilateral decisions without citizen input. The decision to switch from the Detroit Water and Sewerage Department to the Karegondi Water Authority and use the nearby Flint River as a temporary source was made by one emergency manager and overseen by another. Indeed, while the Flint City Council voted in March of 2013 to approve the switch to the Karegondi Water Authority it did not vote about using the nearby Flint River as a temporary water source until the Karegondi line was complete. The decision to use the nearby Flint River was made by Darnell Earley, the presiding emergency manager, and the switch was overseen by the subsequent emergency manager, Jerry Ambrose. What we now know is that Ambrose and his successor Darnell Earley had worked out what is known as a “sweetheart” loan deal that committed the city to using the Flint River until the new pipeline was built. In December of 2016 Michigan’s State Attorney General, Bill Schuette, filed false pretense charges against Ambrose and Earley for their role in manipulating bond finance rules to secure an \$85 million loan for the switch from the Detroit Water and Sewerage to the Karegondi Water Authority. The Karegondi Water Authority, Earley and Ambrose claimed, would, over the long run, save the city millions of dollars, but because it was in financial distress, the city was prohibited from borrowing money to build a new pipeline. To get around this, the emergency managers made use of an environmental loophole that allowed them to borrow money to remediate a lime sludge pond. They took out the loan, ostensibly to clean up the sludge pond but the bulk of the loan went toward helping to pay for the Karegondi pipeline. The loan agreement stipulated that Flint had to use the river as its water source while the pipeline was being built. If Jerry Ambrose had abided by the City Council’s March 2015 7-1 vote to return to the Detroit Water and Sewerage Department, funding for the Karegondi pipeline would have been endangered.

Emergency management provided the underlying framework that allowed the Flint water crisis to occur. Throughout the events leading up to the exposure of the Flint water crisis, emergency management allowed officials to ignore citizens' concerns about the city's water quality in a way that would not have been possible with locally elected officials. With no locally elected officials to turn to and left with emergency managers who were primarily focused on saving money, the citizens of Flint struggled to compel officials to listen to their concerns about the brown, foul smelling water flowing from their taps. They attended town hall meetings, protested, and picketed but to no avail. By closing off avenues for citizens or their representatives to participate in the discussion about the city's water quality, emergency management delayed the identification of the city's water contamination and prevented its timely resolution.

In December of 2016, Michigan Attorney General Bill Schuette brought charges against Jerry Ambrose and Darnell Earley for false pretenses, conspiracy to commit false pretenses, misconduct in office, and willful neglect of duty while in office. The sentences for these charges carry up to twenty years in prison. In the arraignment, Schuette scorned the emergency managers' "fixation with finances and balance sheets... at the expense of public health and safety" (Egan and Anderson). Schuette's scorn is well-deserved but does not extend far enough. Earley and Ambrose were fixated on finances at the expense of public health and safety, but it is Michigan's emergency manager law that allowed them to do so. The point of Michigan's emergency manager law is to remove locally elected officials who, proponents of the law claim, are unable to make the tough but necessary decisions needed to balance a city's budget and replace them with a financial expert who will prioritize financial concerns above all else. Schuette figured the arrests of Ambrose and Earley as a way to bring justice to the citizens of Flint but without also calling into question the

legitimacy of the emergency manager law this makes it appear like Ambrose and Earley were the problems not emergency management.

In the wake of the exposure of the Flint water crisis, Governor Snyder created the independent Flint Water Advisory Task Force and charged them with investigating what led to the water crisis and providing recommendations to prevent a similar tragedy from happening again in the future. In its *Final Report*, the task force criticized Michigan's emergency manager law and claimed that although emergency management supposedly allows financial experts to make better decisions than the citizens and their locally elected officials, emergency managers were "at the heart of the decision-making processes that prolonged lead exposure occasioned by MDEQ's failure to prescribe appropriate treatment for the Flint water system" (41). The task force recommended Governor Snyder "review Michigan's Emergency Manager Law (PA 436) and its implementation, and identify measures to compensate for the loss of the checks and balances that are provided by representative government" (11). The task force suggests the state provide a "structured way to engage locally elected officials on key decisions; an Ombudsman function in state government to ensure that local concerns are a factor in decisions made by the emergency manager; and/or a means of appealing emergency manager decisions to another body" (11). In the year and a half following the publication of the Flint Water Advisory Task Force's *Final Report*, the state has made no move to revise the emergency manager law. A handful of bills seeking to reform Michigan's emergency manager law have been introduced but no hearings have been held. It remains to be seen if the state will abide by the task force's advice and revise its emergency management law and, if so, what this new law will look like.

While Governor Snyder's administration has figured emergency management as integral to improving the financial instability of Michigan's deindustrialized cities the truth is that, in most

cases, emergency management does not have a good track record of success because it does not address the issues that lead to financial distress in the first place. The point behind Michigan's emergency manager law is that it allows a financial expert to quickly get to work in a city and solve its financial problems. Eric Scorsone, in his report "Long-Term Crisis and Systemic Failure: Taking the Fiscal Stress of America's Older Cities Seriously," points out that the cycle of returning to a deficit position after an emergency management appointment is common. According to him, this is because "if cities with chronic fiscal stress are suffering from structural challenges beyond their control, improved management will only be able to cure a limited number of problems" (8-9). Emergency management, according to Scorsone, does not solve the financial problems in Michigan's de-industrialized cities because it addresses symptoms rather than causes. As Joseph Harris, the state appointed emergency manager of Benton Harbor points out, some municipalities are "unlikely to ever have a sufficient tax base" to provide for themselves "so what do you do? [...] What do we do with a City that can't make it? I don't have an answer for that" (Ast). The state has yet to figure out an adequate solution to the problems plaguing its deindustrialized cities.

Dewey's response to Lippmann is a useful starting point for thinking through Michigan's emergency manager law. Dewey disagreed with Lippmann that only experts had the knowledge necessary to participate in decision making and argued that an informed public was not comprised of omniscient individuals but was comprised of individuals who could listen and communicate with one another to work together toward developing solutions to society's problems. Citizen participation, according to Dewey, was integral to solving problems. Dewey's faith in citizens' participation stemmed from his conception of knowledge which differed markedly from Lippmann's. Unlike Lippmann, who believed knowledge was an accumulation of facts gathered by an individual and was, therefore, the domain of experts, Dewey believed that knowledge was

built in “association and communication; it depends upon tradition, upon tools and methods socially transmitted, developed and sanctioned. Faculties of effectual observation, reflection and desire are habits acquired under the influence of the culture and institutions of society” (158). The crisis with democracy, Dewey argued, was not due to the fact that the people could not come to a collective will, but because modernity makes it difficult for them to do so. Like Lippmann, Dewey believes that modernity obscures the way people are connected to others. Modernity, Dewey explains, brought significant changes to community life and led to a proliferation of publics:

There is too much public, a public too diffused and scattered and too intricate in composition. And there are too many publics, for conjoint actions which have indirect, serious and enduring consequences are multitudinous beyond comparison, and each one of them crosses the others and generates its own group of persons especially affected with little to hold these different publics together in an integrated whole. (*The Public and Its Problems* 137)

Like Lippmann, Dewey believes that when individuals do not grasp the ways they are connected with others it makes it difficult for them to come together to work for a common cause. Rather than accept this, however, Dewey argues citizens need more opportunities to participate in inquiry about the nature and remedies of social problems as this will make them more aware of their interconnectedness. Democracy is essential to this endeavor, according to Dewey, as even such basic forms of democracy such as voting on public policies forces citizens to communicate with one another and with officials even if they disagree. Coming to an agreement is not important, the point is that representative democracy encourages citizens to come together to better understand public problems as “the counting of heads compels prior recourse to methods of discussion, consultation and persuasion, while the essence of appeal to force is to cut short resort to such methods” (207).

Dewey was adamant experts cannot know better than citizens because experts cannot even begin to know without them. According to Dewey, “it is impossible for high-brows to secure a

monopoly of such knowledge as must be used for the regulation of common affairs. In the degree in which they become a specialized class, they are shut off from knowledge of the needs which they are supposed to serve” (206). While Lippmann claims that experts are needed to identify issues of concern to the public and to bring these issues to an official’s awareness, Dewey argues important public issues are socially created and, as such, cannot be simply uncovered by experts as “a class of experts is inevitably so removed from common interests as to become a class with private interests and private knowledge, which in social matters is not knowledge at all” (207). Indeed, according to Dewey, the process of coming to knowledge through communication and interaction was at the very heart of democratic practice. Unlike Lippmann, Dewey conceived of democracy as comprised of a social as well as a political component. Rather than accept the fracturing of publics, as does Lippmann, Dewey suggests we need to work to restore our understanding of our interconnectedness with others. The way to do so, Dewey believed, was to provide opportunities for citizens to participate in inquiry about the nature and remedies of social problems. Dewey does not provide explicit guidelines for how to create a sense of interconnection among various individuals, but he figures communication as vital to this endeavor. Dewey argues that the problem of the public is “the improvement of the methods and conditions of debate, discussion, and persuasion” (208). According to Dewey, “methods of persuasion allow for the participation of the public in the process of democratic decision making. The problem of the public is essentially a problem of how we are to organize our lives together so as to perfect the process of inquiry and to improve the ways in which we talk with one another” (208).

Michigan’s emergency management law does not allow citizens, experts, and officials to communicate with one another to make decisions about the public good. Dewey’s response to Lippmann’s proposed technocracy suggests that this is not just an issue of injustice—though it is

certainly that—but it is ineffective. Without democratic communication, according to Dewey, “the public will remain shadowy and formless, seeking spasmodically for itself but seizing and holding its shadow rather than its substance. Til the Great Society is converted into a Great Community, the Public will remain in eclipse. Communication can alone create a great community” (142). The only way to identify public problems and work toward their solution is to provide citizens with more opportunities to participate in discussion and debate about important public issues not less. The promise of democracy is that it allows citizens to work together for the public good. To do so, however, an individual must have an opportunity to speak and be heard, to persuade other citizens, representatives, and officials—the very things Michigan’s emergency manager law prevents. Proponents of emergency management argue that the temporary removal of democracy is a necessary first step toward getting financially distressed cities back to democratic functioning. Emergency management, however, has had limited success, and, in Flint, has had tragic consequences. The Flint water crisis establishes that the solution to the financial instability of Michigan’s deindustrialized cities cannot come from experts working apart from citizens but must be developed with their input. The only way to work toward a solution to the intractable problems plaguing Michigan’s financially distressed city is with citizens, experts, and officials working together toward the common good.

CHAPTER 3 “LOOKING TO SEE WHERE THE SHOE PINCHES: THE DEMOCRATICIZING POTENTIAL OF CITIZEN/EXPERT RELATIONSHIPS”

LeeAnne Walters, a stay-at-home mom of four, paid little attention when Flint, the city she had recently moved to, switched its water source from The Detroit Water and Sewerage Department to the nearby Flint River. While some residents were opposed to drinking water from the river that, in previous generations, had been used by nearby manufacturing plants to dump waste into Walters was not concerned. She trusted that the officials and experts who oversaw the city’s drinking water would follow the appropriate procedures to keep the residents safe. Shortly after the switch, however, her family began to experience unexplained health problems. Her younger sons, four-year-old twins, developed painful rashes over their entire bodies and one did not seem to be growing as quickly as his brother and had developed a concerning speech delay. Her older son was experiencing unexplained nausea, dizziness, and headaches. Doctors performed ultrasounds, a colonoscopy, and an emergency CAT scan but could not find anything to explain his symptoms. Walters’ husband developed abscesses and everyone in the family, including Walters, was losing hair at an alarming rate. Walters felt like “we had all these puzzle pieces but still couldn’t figure out what was going on” until one day about eight months after the water switch, she turned on the kitchen faucet and the water was brown (Jung). Walters realized that despite officials’ assurances that the city’s water was safe something had to be wrong.

A few weeks after her tap water turned brown, the city sent out a notice telling citizens that the levels of trihalomethane—a disinfectant byproduct—in the city’s drinking water had exceeded federal safety standards. In response to the alert the city invited citizens to attend a town hall meeting about the water quality. Walters and other concerned citizens filled jugs with discolored tap water and brought them to the meeting to provide as proof to officials that something was wrong with the city’s water. Mike Prysby, an engineer at the Department of Environmental Quality

and Jerry Ambrose, the city's emergency manager, dismissed the citizens' evidence. According to Walters, "as I was showing them my water, I was told I was a liar and I was stupid by showing these bottles of water" (Jacob). The Department of Environmental Quality's water analysis indicated that except for high levels of trihalomethane the city's water met the Environmental Protection Agency's safety guidelines. Recent tests showed the trihalomethane levels were going down and there was no cause for concern. According to the Department of Environmental Quality, there was nothing in the water analysis that would explain the color of the water sample Walters showed them and there was certainly nothing that corroborated the citizens' claims that the water was causing a host of unexplained health problems. There was no way, they thought, the brown water Walters showed them and the water described by the city's analysis could be the same—Walters had to be lying.

Walters left the town hall meeting frustrated and not sure what to do next. Going to the city council and mayor was not an option as the financially distressed city was under emergency management. The council and mayor's powers had been removed and Ambrose had been appointed by Governor Snyder to unilaterally run the city. Ambrose was in charge and he was adamant the city would use the Flint River as a temporary water source until it could build its own pipeline, a measure projected to save the financially distressed city \$5 million. If the citizens had to drink brown water in the meantime, so be it. Ambrose was there to balance the city's budget and if getting water from the river would save the city money that was what was going to happen. Besides, even though citizens were unhappy about the foul-tasting brown water coming from their taps, officials at the Michigan Department of Environmental Quality assured him their tests showed the water was perfectly safe to drink.

Walters came home from the town hall meeting frustrated but determined to prove she was right that something was wrong with the water. Speaking to her husband that night she wondered, “how do we make ’em believe us? How do we get to a point where they can’t sit there and say shit like this?” (Hernandez) It struck her she had been going about things all wrong. Officials were able to ignore her because her testimonies and jugs of water were not scientific evidence. Walters realized that to convince local and state officials that something was wrong with the water, we “gotta get to the science, ’cause you can’t argue with science” (Hernandez). Getting to the science, however, was easier said than done. Walters, a stay-at-home mom who had been trained as a medical assistant, had neither the technical knowledge nor the resources needed to perform the wide-scale water analysis deemed necessary by the Safe Drinking Water Act, the federal policy that guides the identification and treatment of contaminated water. Eventually, Walters did expose the water crisis, but the only way to do so was enlisting the help of Marc Edwards, a civil engineering professor from Virginia Tech, to translate her personal knowledge into the language of “objective” scientific validation. Doing so took almost a year, during which time the citizens of Flint continued to be exposed to high levels of lead.

The tragedy of the Flint water crisis is that citizens knew that despite the state’s assurances something was horribly wrong with the water but because the Safe Drinking Water Act does not allow for citizens’ personal knowledge and observations they were not able to compel officials to do anything. If citizens’ knowledge had been an allowed persuasive force in determining what is and is not contaminated water the crisis in Flint could have been exposed in a timely manner and the extent of the tragedy would have been limited. In this chapter, I argue that enlisting the help of an expert to expose the water crisis was successful, but this configuration of expertise/citizen knowledge is limited as a model. Enlisting the help of an expert to translate what the citizens

already knew into the language of scientific validation contributes to the privileging of experts' objective knowledge over citizens' knowledge based on personal experience and observation—the very thing that made it so difficult for Walters to expose the crisis in the first place. This chapter argues John Dewey's ideal of the democratic citizen/expert relationship offers a more effective model that integrates personal and observational knowledge with experts' scientific and technical knowledge.

This chapter begins with a brief historical overview of the rhetoric of science and technology studies to establish that recent rhetorical-ontological theories that trace the construction of knowledge and decision making within a socio-material network are particularly useful for thinking through ways to integrate experts' scientific evidence and citizens' knowledge that is based upon personal experience and observation. The section that follows this historical overview traces Walters' struggle to expose the Flint water crisis to establish the need to integrate experts' knowledge based on scientific evidence and citizens' knowledge based on personal experience and observation. This chapter concludes by arguing that citizen/expert relationships must work toward promoting citizen participation in decision making about important public issues such as water quality and safety.

Objective and Subjective Knowledge in Rhetoric of Science and Technology Studies

Beginning in the 1960s, the rhetoric of science and technology studies showed an increasing understanding of scientific endeavor as socially constructed rather than as “objective” reflections of reality. Prior to the publication of Thomas Kuhn's 1962 *The Structure of Scientific Revolutions*, conventional wisdom had it that scientific analysis provided factual descriptions of the natural world and as such was a transparent transmitter of natural facts. Scientific progress, it was believed, was marked by a steady accumulation of scientific facts gathered from objective

analysis. Kuhn, however, challenges this positivist belief and claimed it did not fit reality as many contemporary scientific theories did not simply expand upon the theories of the past but were “incommensurable” with them. In other words, rather than build upon previous theories new scientific theories often compete with them. Kuhn points out, for example, the Newtonian paradigm is incommensurable with its Cartesian and Aristotelian predecessors just as Lavoisier’s paradigm is incommensurable with that of Priestley’s. Each of these paradigms required scientists not to build upon current theory, but to abandon prior beliefs and adopt new ones. Kuhn challenges the idea of cumulative scientific advancement that figured science as progressively working toward an ever more accurate approximation of truth by arguing instead that scientific knowledge was uneven and, much like evolution, had no teleological end toward which it was advancing. This is not to say Kuhn did not account for the steady accumulation of scientific knowledge, he did. The bulk of scientific practice, according to Kuhn, is made up of “normal science”—wherein scientists primarily work to contribute to and refine the current prevailing theory. Kuhn suggests, however, that when a “paradigm shift” occurs the work of the “normal scientists” shifts to support the current theory as well. Scientific revolutions, he argues, create “paradigm shifts” that determine the questions “normal science” will preoccupy itself with. These paradigm shifts result in a period of competing paradigms as scientists are committed to the prevailing paradigm and are often not receptive to the new one. Those introducing a new paradigm, then, must persuade the rest of the community to abandon the old paradigm and embrace the new. According to Kuhn, then, scientific endeavor is fundamentally rhetorical.

Scientific writing had traditionally been thought constrained by logic and empirical data, and as such seemed far removed from the types of analysis appropriate for poetry, political speeches, and political discourses. As the understanding that scientific discourse was socially

constructed gained traction, however, rhetoricians began to identify and analyze persuasion in scientific writing. By analyzing scientific journal articles such as Watson and Crick's "A Structure for Deoxyribose Nucleic Acid," alongside social science articles, and critical readings of poetry, however, Charles Bazerman, in *Shaping Written Knowledge*, highlights that scientific writing was, indeed, rhetorical. Bazerman analyzes Watson and Crick's article on DNA alongside works of poetry and fiction to call attention to the social forces that shaped the development of the experimental article in science. Bazerman argues that scientific writing does not merely reflect scientific knowledge but contributes to it as well. In tracing the emergence of the experimental report and its development into a genre he showed how the genre of the academic journal article and disciplinary knowledge are co-constituting. In the process of analyzing scientific writing as a means to improving writing practices, it became clear to Bazerman that scientific writing contributes to the creation of scientific knowledge and that "the development of the experimental article is part of the same process that created our modern concept of experiment" (475). The genres of scientific writing, he explains, encourage some types of future scientific processes and discourages others.

Alan Gross, in *The Rhetoric of Science*, extends the argument that scientific writing constitutes scientific knowledge. According to Gross, the "'brute facts' themselves mean nothing; only statements have meaning, and of the truth of those statements we must be persuaded. These processes, by which problems are chosen and results interpreted, are essentially rhetorical: only through persuasion are importance and meaning established" (4). Gross' idea that scientific knowledge is socially constructed is at odds with the conventional, positivist belief that scientific endeavor reflects objective knowledge that exists independently of an individual's perception. Gross argues that the content of what scientists write about is less important than the ways they

persuade their community of a particular interpretation. Gross envisions rhetoric as applicable to a broad variety of fields and practices and argues that although Aristotelian rhetoric was developed for politico-judicial discourse this does not have to prevent contemporary rhetoricians from applying Aristotelian concepts to fields and texts outside this purview. According to Gross, Aristotle's definition of rhetoric as the "art of finding in each case the existing means of persuasion" is broad enough to allow us to utilize rhetorical analysis in any persuasive situation.

Dilip Gaonkar, in "The Idea of Rhetoric in the Rhetoric of Science," alerts rhetoricians to the problem with portraying scientific discourse as acts of persuasion, arguing against using rhetorical theory to understand phenomenon beyond the political-judicial context for which it was originally developed. Gaonkar argues against expanding Aristotle's definition of rhetoric to include any practice that is persuasive. The "globalization" of rhetorical theory, he argues, leads not, as its practitioners claim, to a more robust version of rhetoric but to theoretical "thinness." According to Gaonkar, the "promiscuous" use of the term "rhetoric" allows us to find it everywhere but in so doing removes specificity from the term and does not allow for a distinct enough identity for rhetorical theory to distinguish itself from other theoretical practices. The problem with the globalization of rhetorical theory, Gaonkar claims, is that Aristotelian rhetorical theory is incommensurable with postmodernist theories. Aristotelian rhetorical theory, he points out, conceives of rhetoric as a practical/productive activity not a critical/interpretive

activity. Gaonkar questions if it is possible to

translate effectively an Aristotelian vocabulary initially generated in the course of 'theorizing' about certain types of practical (praxis) and productive (poesis) activities delimited to the realm of appearances (that is, 'public sphere' as the Greeks understood it) into a vocabulary for interpretive understanding of cultural practices that cover the whole of human affairs, including science? (italics in the original 30).

The problem with utilizing the vocabulary of classical rhetoric, a vocabulary primarily created to direct performance rather than facilitate understanding, Gaonkar explains, is that doing so relies on an ideology about human agency that proves untenable in the face of post-structuralist theories.

As Gaonkar explains, inherent in ancient rhetorical theory is “a view of speaker as the seat of origin rather than a point of articulation, a view of strategy as identifiable under an intentional description, a view of discourse as constitutive of character and community, a view of audience positioned simultaneously as ‘spectator’ and ‘participant,’ and finally, a view of ‘ends’ that binds speaker, strategy, discourse, and audience in a web of purposive actions” (32-33). Gaonkar’s primary critique is that because classical rhetoric is at odds with the post-structuralist understanding of the individual as a construction of social forces it cannot function as a general hermeneutic. This brings to the fore questions about the extent to which rhetorical theory can usefully be applied to fields, like science, that are outside its traditional scope.

Following Gaonkar’s critique, rhetoricians of science and technology studies have not limited the scope of rhetoric but have instead developed theories that better account for scientific endeavor. In recent years, an increasing number of rhetoricians of science have found the work of Bruno Latour a particularly productive starting point for developing nonmodernist/postmodernist theories that account for the way people interact with other people and objects to shape phenomenon. An affordance of this approach is it conceives of agency as not an object that an individual either does or does not “have” and, instead, locates agency not in the human subject but as arising from the associations of humans to other humans and objects.

In *Reassembling the Social*, Latour argues that not only are human beings “actors” but so too is “*any thing* that does modify a state of affairs by making a difference” (Italics in the original 71).

Latour claims that humans and nonhumans are “symmetrical”—that the difference between human

and nonhuman “actants” arises from the conditions of the network itself and should not be assumed to be inherent. Actor-network-theory not only expands the number of actors that come into view when describing the nature of a given phenomenon, but also allows for an understanding of phenomenon as the result of the association between human and nonhuman actors. Latour’s actor-network-theory (ANT) provides an account of the way people interact with other people and objects to shape phenomenon. ANT, Latour argues, is grounded in the understanding that the “social” is not some glue that could fix everything including what the other glues cannot fix; it is *what* is glued together by many *other* types of connectors” (5). Because the social is the result of the association of various human and nonhuman actors the only way to understand the social, Latour claims, is to trace the association among actors in any given network. Tracing the associations between human and nonhuman actors provides a model of reality that does not rely on positivist objectivity or post-structuralist social construction but explains how material and semiotic networks act together to form a phenomenon. This is particularly useful for the rhetoric of science as it understands scientific practice as social without portraying it as a mere social construction.

There is a growing interest in the rhetoric of science and technology studies in rectifying the way that the rhetoric of science has focused on internal scientific discourse to the exclusion of the institutional and the material. The scholarship of both Christa Teston and Scott Graham, for example, trace the construction of knowledge and decision making within a socio-material network. Teston’s work on cancer board meetings, “Moving from Artifact to Action,” traces the way medical professionals—physicians, surgeons, radiologists, and oncologists—deliberate about diagnoses, staging, and options for treatment. She argues that while these medical professionals rely on visual displays of evidence such as X-rays, MRIs, and other scans, these visual

presentations, she argues, do not merely represent the cancer, as we often assume, but instead “exert suasive force” (19). Teston’s unpacking of the interconnected social and material context of cancer diagnosis and treatment decisions positions diagnostic scans not as objective reflections of reality but instead as actors situated among other material, institutional, and human actors. Along similar lines, Graham, in *The Politics of Pain Medicine*, argues the phenomenon of pain highlights the inadequacy of positivist epistemologies of science and medicine. According to Graham, before the development of fMRI and other diagnostic scans that allow physicians to see neural activity in the body diseases such as migraines and fibromyalgia patients were often told the pain they felt was psychological and did not really exist. According to Graham, developments such as fMRI allow physicians to see evidence of pain. This allows for better diagnosis but does address the problem that patients’ self-reports of pain are often not taken as evidence of disease. Graham argues that

In the face of the manifest success of CBD through neuroimaging, ethical concerns persist. It is arguably a good thing that CBD through neuroimaging authorizes patient subjective report in cases of previously illegitimate diseases. Indeed, there is a long history of patients not receiving proper care for migraines and FMS. The ontologization of these diseases through CBD offers a great help in this regard. While fibromyalgics and migraineurs manifestly benefit from CBD through neuroimaging, it is still an act of epistemic violence. Patient subjective report is still not trusted, and these patients still are not authorized to speak and be heard. Fibromyalgics and migraineurs are silenced once again as they are spoken for. (144)

Graham argues for “rhetorical-ontological” theories that understands the phenomenon of pain through neither objective diagnostics nor subjective self-reports but allows for the integration of the two.

Mobilizing the Persuasive Force of Scientific Validation/Getting to the Science

This section expands upon the work of Teston and Graham by returning to the example of the Flint water crisis to establish the need to integrate experts’ technical knowledge and citizens’ knowledge based on personal experience and observation. Indeed, Walters’ difficult and time-

consuming struggle to mobilize the persuasive force of “objective” scientific validation is, unfortunately, an ideal site to explore the tragic consequences possible when experts’ knowledge is separated from and privileged over citizens’ knowledge. The Safe Drinking Water Act privileges scientific validation and excludes citizens’ personal knowledge and does not provide citizens with a meaningful role in the decision-making process about water quality and safety. It provides adequate provisions for notifying the public about the quality of its drinking water but does not afford opportunities for citizens to share their knowledge with experts. According to the Safe Drinking Water Act, administrators of a water utility “may hold public hearings for the purpose of gathering information from technical or other experts, Federal, State, or other public officials, representatives of such public water systems, persons served by such systems, and other interested persons.” The decision to hold such hearings, however, is not mandatory but is left to individual administrators’ discretion and, at least in the case of Flint, was not something they were willing to do. The Safe Drinking Water Act assumes that citizens’ knowledge is not valuable when it comes to decisions about water quality and safety.

The privileging of objective scientific validation made it difficult for Walters to expose the water crisis. When she first began to suspect that her family’s recent, unexplained health problems were connected to the city’s switch from The Detroit Water and Sewerage Department to the Flint River, her first move was to contact the city and request a home water test. It revealed that her lead levels were 104 ppb—ten times the EPA limit. The local water utilities director, Mike Glasgow, duly reported these test results to the Michigan Department of Environmental Quality’s Office of Drinking Water Management—the department responsible for overseeing the EPA’s Safe Drinking Water Act in the State of Michigan. They assured him that Walters’ lead levels were due to aging lines within the home and did not indicate a problem with the city’s water. Walters, for

her part, had replaced the old plumbing in her home with PVC just two years before and had even installed a whole house water filter for good measure. She therefore knew the lead could not be coming from within her home. Convinced that the problem was widespread and recognizing that officials would not listen to her or accept the citizens' physical evidence as proof that something was wrong, Walters went about becoming as knowledgeable as possible about water regulations and testing. She went online where she accessed the city and Michigan Department of Environmental Quality water reports as well as the EPA's water regulations. What she found was unsettling. The city had not followed appropriate protocol while testing her water. According to section 141.86 of the Lead and Copper Rule of the Safe Drinking Water Act "each first-draw tap sample for lead and copper shall be one liter in volume and have stood motionless in the plumbing system of each sampling site for at least six hours." The Department of Environmental Quality, however, had instructed Glasgow to flush Walters' pipes for twenty minutes before collecting her water samples, a practice that leads to lower lead level readings. Even more concerning was that, according to the Department of Environmental Quality's water reports, corrosion control was not being added to the city's water.

Armed with this information, Walters contacted Miguel Del Toral at the regional EPA and shared her findings with him. Del Toral did not immediately believe her. As he was to later explain, "even though she had told me that, in my head, I was thinking that's not possible. That's, you know, I couldn't believe that was true. I thought there was a misunderstanding here or some kind of miscommunication" (Smith). Del Toral, however, followed up on her concerns and contacted officials at the Department of Environmental Quality who explained they had chosen not to implement a corrosion control treatment plan in Flint, but had, instead, opted to do two rounds of testing six months apart. Del Toral was stunned. He immediately suspected that the lack of

corrosion control was causing lead to leach from the city's aging pipes and was leading to widespread lead poisoning. Del Toral reported his findings to his supervisors and requested further water testing. Instead of taking immediate action as he expected, however, the EPA held off on further water tests and asked the Department of Environmental Quality to provide proof that the necessary corrosion control was, indeed, being added to Flint's water. The EPA allowed one deadline after another to pass without penalizing the Department of Environmental Quality for failure to provide such proof. To make matters worse, the EPA chose not to cite the City of Flint with a violation that would have required the city to notify the public it had failed to implement corrosion control.

Not knowing what to do next and not wanting to lose his job, Del Toral leaked to Walters a copy of an internal memo in which he explained that

a major concern from a public health standpoint is the absence of corrosion control treatment in the City of Flint for mitigating lead and copper levels in the drinking water.

Recent drinking water sample results indicate the presence of high lead results in the drinking water, which is to be expected in a public water system that is not providing corrosion control treatment. (Del Toral)

Walters and Del Toral assumed that this would arm her with the proof needed to expose the water crisis. Sadly, they were mistaken. Walters contacted an investigative reporter who published the memo but a spokesman for Michigan's Department of Environmental Quality, Brad Wurfel, assured citizens that "anyone who is concerned about lead in the drinking water in Flint can relax" and that "it does not look like there is any broad problem with the water supply freeing up lead as it goes to homes" (Smith). When Walters and a group of activists were invited to meet with top aides from Governor Snyder's office and officials from the Department of Environmental Quality

at the state capitol to discuss the memo, Walters was stunned when officials “blew us off like we didn’t know what we were talking about” (Hernandez). The officials explained to the group of citizens that Del Toral’s memo was only a preliminary memo that had not been properly vetted and portrayed him as a “rogue” employee who was trying to make trouble within the organization. The Department of Environmental Quality officials assured Walters and her fellow activists that he was wrong and that their analyses showed the city’s water was safe to drink.

Walters did not give up. That night she contacted Marc Edwards, a civil engineering professor from Virginia Tech who had a reputation for working with communities to take a stand against scientific misconduct at the Environmental Protection Agency and other powerful agencies. Edwards stepped Walters through the process of collecting her own water samples, this time without pre-flushing the pipes as the city had done and had her send them to him for analysis. When the results came back at 13,200 ppb, more than twice the level of what the Environmental Protection Agency categorizes as hazardous waste, Edwards knew there was no way the lead contamination was limited to her home and was stunned at the lack of response from the Department of Environmental Quality and the Environmental Protection Agency. As he was to later explain, “at that point, you do not just have smoke, you have a three-alarm fire and should respond immediately” (Lynch).

The lack of response made Edwards suspect the Department of Environmental Quality and the Environmental Protection Agency were guilty of scientific misconduct. He, unfortunately, had experience with this type of thing from his previous work investigating the 2001 lead contamination of Washington D.C.’s water supply. Similar to Flint, the corrosion in Washington D.C.’s pipes had caused lead to seep into the city’s water supply resulting in widespread elevated levels of lead. Like Flint, the agencies that were supposed to keep citizens safe did not follow

proper protocol. In Washington D.C. the water utility had invalidated samples that pointed to rising lead levels and had issued a report claiming the water met federal standards while the Centers for Disease Control claimed the water was safe and that no D.C. residents had been harmed. In 2010, however, it was proven that Edwards had been correct: the CDC had lied to the public and had falsely claimed lead levels had not posed a health risk to D.C. residents.

Edwards stepped in to help the citizens of Flint when officials did not. In September of 2015, Edwards held a press conference where, with Walters and other concerned activists by his side, he held up two small bottles of tap water—the same tap water Walters had shown to Prysby and Ambrose just nine months before. One bottle was orange and the other clear. In each bottle, Edwards had placed a nail. The clear one, he explained, had been treated with corrosion control. The orange one, so discolored the nail was not visible, contained untreated Flint tap water. Edwards explained that the iron nail was disintegrating into the water and that without corrosion control, the Flint River water was doing the same to the city’s distribution pipes. He told them Flint was the only city in America that he knew of that did not have corrosion control in place to prevent this from happening and “this water looks bad. It smells bad. It tastes bad. And this is part of what people have been complaining about” (Fonger). Edwards warned the citizens that the real danger was not the iron they could see but the lead that was also leaching from the city’s pipes and that they should immediately quit drinking the tap water. Within two weeks of Edwards’ press conference, Governor Snyder acknowledged the state had been wrong all along and, nineteen months after the switch to the Flint River, he issued a lead advisory warning the citizens of Flint to not drink the water. Walters was finally able to prove something was wrong with the water, but the only way she was able to do so was by teaming up with a water quality expert who could translate what she knew from personal experience and observation into the language of “objective”

scientific validation. While this successfully exposed the water crisis, it did not establish the importance of knowledge based upon personal experience and observation but instead contributed to the privileging of “objective” scientific validation that silenced the concerned citizens of Flint in the first place.

Toward a More Democratic Relationship Between Citizens and Experts

Lippmann argues that decision making should be left to experts and citizens should be limited to voting elected officials in and out of power. Dewey, however, was adamant that citizens’ knowledge is integral to understanding public problems and that “no government by experts in which the masses do not have the chance to inform the experts as to their needs can be anything but an oligarchy managed in the interests of the few. And the enlightenment must proceed in ways which force the administrative specialists to take account of the needs” (208). Dewey argues that knowledge does not exist outside social interactions and, as such, cannot be uncovered by experts without the citizens’ input. What Lippmann gets wrong, according to Dewey, is that experts cannot identify and solve social problems without citizens because citizens are integral to this process. Citizens’ participation is absolutely necessary, Dewey explains, because “the man who wears the shoe knows best that it pinches and where it pinches, even if the expert shoemaker is the best judge of how the trouble is to be remedied (207). Experts and citizens, Dewey insists, must work together to identify and solve social problems. Dewey argues that Lippmann exaggerates the extent to which technical knowledge is needed to participate in decision making. According to Dewey,

Inquiry, indeed, is a work which devolves upon experts. But their expertness is not shown in framing and executing policies, but in discovering and making known the facts upon which the former depend. They are technical experts in the sense that scientific investigators and artists manifest *expertise*. It is not necessary that the many should have the knowledge and skill to carry on the needed investigations; what is required is that they have the ability to judge of the bearing of knowledge supplied by others upon common concerns. It is easy to exaggerate the amount of intelligence and ability demanded to render such judgments fitted for their purpose. (209)

Dewey did not believe citizens were currently capable of this participatory ideal and that “until secrecy, prejudice, bias, misrepresentation, and propaganda as well as sheer ignorance are replaced by inquiry and publicity, we have no way of telling how apt for judgment of social policies the existing intelligence of the masses may be.” He was confident, however, that “it would certainly go much further than at present” (209). Dewey’s ultimate goal is for citizens to participate directly in decision-making and he envisions a democratic society in which experts openly share their information with the public who use this information to make decisions. According to Dewey, this is the goal toward which we should be working.

In some ways, Edwards’ and Walters’ collaborative investigation in Flint is evocative of the kind of alliance between citizen and expert that Dewey promoted. Even before Flint, Edwards was committed to a belief that “science should be about pursuing the truth and helping people” (Kolowich). According to Edwards, “We’re all on this hedonistic treadmill—pursuing funding, pursuing fame, pursuing h-index—and the idea of science as a public good is being lost. [...] We have to get this fixed, and fixed fast, or else we are going to lose this symbiotic relationship with the public” (Kolowich). In his investigations in Flint, Edwards stayed true to his ideals to work for the public. He used his scientific knowledge for the public good and encouraged a symbiotic relationship between citizens and experts. In the months following his initial testing, Edwards shared his findings with the public on a blog he created—flintwaterstudy.org—and at press conferences. He filed Freedom of Information Act requests for documents and emails of state and city officials to find out how much they knew and what they could be covering up and made this information available to the public as well. Edwards involved citizens in his investigation by training a group of citizen scientists to work with him to test the water of over 5,000 Flint homes and officially added Walters to his team. While Edwards’ was committed to using his technical

expertise in the public interest he did not follow a Deweyan model of providing citizens with the information they would need to convince officials something was wrong with the water. Instead, citizens collected data for Edwards who then analyzed the results and then acted on the citizens' behalf. It was Edwards who announced the citizen scientists' findings at press conferences. It was Edwards who contacted and spoke to investigative journalists. It was Edwards who put pressure on the Environmental Protection Agency and the Michigan Department of Environmental to acknowledge the city's water was contaminated with lead. Edwards was integral to exposing the crisis and his desire to use his technical expertise on behalf of the public should be commended. If it were not for Edwards it is hard to tell when the crisis would have been exposed. It is important, however, to understand the unintended repercussions of working on behalf of the public good.

Despite Edwards' commitment to work for the public good his investigation in Flint participates in the narrative that privileges scientific validation over citizens' knowledge--the very thing that made it so difficult for Walters to expose the crisis in the first place. In the aftermath of the crisis, the media, in general, figured Edwards as a kind of academic white knight and the citizens as helpless victims in need of rescue by a knowledgeable expert. This is no more apparent than *TIME* Magazine's including Edwards as one of its 100 Most Influential people of 2016 and as a finalist for its 2016 Person of the Year Award. According to *TIME*,

residents knew something was wrong right away, but to get anyone to listen, it took civil-engineering professor Marc Edwards blowing the whistle on lead in the water and then Dr. Mona Hanna-Attisha, a local pediatrician, testing Flint's kids, proving they'd been poisoned. Up against official ignorance and indifference, Edwards and Hanna-Attisha were right, they were brave, and they were insistent. Flint is still a crime scene, but these two caring, tough researchers are the detectives who cracked the case. (Ridley)

Lost in this narrative is that Edwards' investigation provided the scientific evidence that validated what Walters had been saying all along. Edwards did not discover that the water was contaminated—Walters did.

Forming an alliance with an expert who was willing to use his expertise to validate what the citizens had been saying successfully exposed the Flint water crisis. Before Walters contacted Edwards, she and her fellow concerned citizens had tried for months to get officials to listen to them to no avail. In an interview after the exposure of the crisis Walters explains that at the January 2015 Town Hall meeting about the recent boil water alert “people were holding up these bottles of water, bags of hair. They had rashes. We knew that no one was listening to us. There was all this physical evidence, no one cared” (Russell). The tragedy of the Flint water crisis was that there was ample physical and material evidence that pointed toward something being wrong with the water but because the Safe Drinking Water Act allows “objective” scientific evidence to exert a monolithic persuasive force in decisions about water quality and safety citizens could not compel officials to do anything. Walters could not use her jugs of brown water as evidence that something was wrong. She could not use her family’s health problems. She could not use her hair loss. She could not use GM’s decision to switch from the Flint River to the county water because the city’s water was corroding their auto parts. The only way Walters was able to expose the crisis was by enlisting the help of an expert who could gather the scientific evidence necessary to prove what Walters already knew—that the brown water flowing from her taps was causing her family’s health problems. Walters’ tactic of getting to the science eventually exposed the crisis, but it did not result in a situation where citizens could speak up and be heard; rather, it led to a situation where officials listened to an experts’ “objective” scientific analysis—the very thing that exacerbated the crisis in the first place. As Walters explains, the alliance between expert and citizen both is and is not a victory:

I wish [Flint] would’ve listened to us sooner. People think this is such a great victory and to be honest with you, it is, and it’s not. Because to me, we knew April of 2015, we tried to tell people, we tried to get the word out, hoping people would believe us. The State and City discredited us every which way they could, the media wouldn’t listen to

us. [...] And so, every time a mother comes to me, telling me the issues that their child has, that her child is diagnosed with lead poisoning in September of 2015 to January of 2016 and the problems their child is facing, it breaks my heart because it didn't have to Happen. (Constantine Cannon Whistleblower Lawyer Team)

Enlisting the help of an expert to translate what she already knew—that something was wrong with the city's water—into the language of “objective” scientific validation exposed the water crisis but did little to address the fact that officials dismissed citizens' knowledge based on personal experience and observations.

The tragedy of the Flint water crisis is that there was ample anecdotal and circumstantial evidence that pointed toward something being wrong with the water, but the only way Walters could get officials to listen to her was to translate what she already knew—that the brown water flowing from her taps was the cause of her family's unexplained health problems—into the language of scientific validation. While decisions about technical issues such as water quality and safety may appear on the surface too technical—and too important—to allow for citizens' knowledge, the Flint water crisis establishes that allowing “objective” knowledge to exert a monolithic persuasive force does not necessarily lead to better decisions and can have tragic consequences. This does not mean that “objective” technical knowledge is not important—it is—or that decisions about water supply and safety should be left only to citizens' subjective knowledge—it should not—but that we need to allow for citizens' knowledge based upon personal experience and observations as well as “objective” scientific validation. Water quality and safety may seem like an issue best left to experts. The Flint water crisis, however, establishes that excluding citizens' subjective knowledge can have tragic consequences. Citizens' subjective knowledge can be a valuable resource in decision-making even regarding such technical issues as water quality and safety. The citizens of Flint were the ones experiencing nausea, headaches, rashes, and hair loss. They were the ones whose water was brown and smelled bad. They were the

ones whose skin burned when they bathed. They were the ones who know something was horribly wrong with the water. Because the Safe Drinking Water Act does not allow citizen's testimonies and observations as evidence of contamination, however, they could not use the jugs of brown water or their health problems as evidence that something was wrong. The relationship between citizen/expert has the potential to fill this gap but only if experts work to support citizens in their endeavors to participate in the debates and discussions about the issues that affect their lives.

CHAPTER 4: “CITIZEN PARTICIPATION AND REPORTS FOR DECISION MAKING: A FORMAL ANALYSIS OF THE FLINT WATER ADVISORY TASK FORCE *FINAL REPORT*”

When Governor Snyder announced the widespread contamination of the water in Flint on October 1st, 2015, many wondered how the State of Michigan had been able, for almost an entire year, to dismiss the citizens’ concerns about their water and insist it was safe to drink. How was it possible that the City, the Department of Environmental Quality, the Department of Health and Human Services, the Environmental Protection Agency, and the state all failed to protect the citizens of Flint? In the midst of the confusion about who was responsible for the crisis and how it had been allowed to continue so long Governor Snyder created the independent Flint Water Advisory Task Force and on October 21st, 2015 charged them with reviewing municipal, state, and federal actions regarding the water crisis and offering recommendations for future guidelines. Over a period of five months the task force, which included experts in public policy, public utilities, environmental protection, public health, and health care interviewed the people involved in the decisions that led to the crisis and sifted through documents available in the public record to determine what led to the crisis. The task force’s *Final Report*, issued on March 21st, 2016 placed accountability for the water crisis with the state government and, in its executive summary, accused the state of “failure, intransigence, unpreparedness, delay, inaction, and environmental injustice” (1). Despite these harsh words of criticism, however, the report downplays the extent of the state administration’s role in the crisis.

In its *Final Report*, the task force places accountability for the events that led to the crisis with Governor Snyder and his administration but does not adequately address that his administration made it almost impossible for citizens to compel officials to take their concerns seriously. This is not because the task force was not aware of the role citizens had played in

exposing the crisis and that the state had made it difficult for them to do so. In its executive summary, the task force explains that the Flint water crisis is not only a story of failure but a story of

something that *did* work: the critical role played by engaged Flint citizens, by individuals both inside and outside of government who had the expertise and willingness to question and challenge government leadership, and by members of a free press who used the tools that enable investigative journalism. Without their courage and persistence, this crisis likely never would have been brought to light and mitigation efforts never begun. (1)

The task force knew citizens and outside experts had struggled for over a year-and-a-half to expose the crisis, despite the fact that the state had made it nearly impossible for them to do so. They knew it was LeeAnne Walters who first identified that the city was not using corrosion control and suspected this was causing her high lead levels and they knew officials from the Michigan Department of Environmental Quality and Governor Snyder's office repeatedly dismissed her concerns and assured her and other concerned citizens that the water was safe to drink. The task force's findings and recommendations do not, however, seek to increase meaningful citizen participation that would have made it easier for Walters and other concerned citizens to have exposed the crisis much sooner. This is not to say that the task force's recommendations are not vital—they are. The task force's recommendations that Governor Snyder strive to transform the state of Michigan into a national model for preventing, identifying, and responding to drinking water contamination is a worthy goal. This is to say that in not addressing the failures of democracy that provided the underlying framework for the crisis to occur the recommendations are partial. To effectively prevent a future tragedy like the Flint water crisis from occurring in the future, however, it is important for the state to provide citizens with opportunities for meaningful democratic participation.

This chapter analyzes the Flint Water Advisory Task Force's *Final Report* to argue that the task force's recommendations do not address the failures of democracy that provided the underlying framework for the crisis to occur, and, as such, are inadequate at preventing a similar tragedy from occurring in the future. This chapter argues that the form of the report obscures the full extent of the State of Michigan's role in the water crisis. This analysis of the Flint Water Advisory Task Force's *Final Report* is grounded in an understanding that reports for decision making mediate thinking and guide inquiry. The form of the *Final Report*, this chapter argues, guided the task force's inquiry and led it to provide recommendations for each agency/entity that was responsible for the water crisis and, in so doing, obscured the full extent to which the State of Michigan was responsible for the crisis. This chapter will begin with a discussion of the context surrounding the Flint Water Task Force's Inquiry and to which the *Final Report* contributes. This chapter will then analyze the form of the *Final Report* to argue that the task force, guided by the desire to identify the ways various agencies/entities contributed to the Flint water crisis prevented it from providing findings and recommendations that adequately addressed the democratic failures that allowed the crisis to occur. This chapter will then turn to the debate between Dewey and Lippmann about the extent to which citizens should participate in decision making to argue for a need to make citizen participation a central criterion upon which to guide inquiry in reports for decision making. This chapter concludes with a call for technical communication instructors to encourage students to make citizen participation a central criterion upon which to guide inquiry in reports for decision making. Doing so, this chapter argues, works toward modifying the genre of the report for decision making to better encompass citizen participation.

Context Surrounding the Flint Water Advisory Task Force's *Final Report*

The Flint Water Advisory Task Force was created just days after Governor Snyder officially acknowledged the high levels of lead in the city's water. In the weeks following the crisis, Governor Snyder was tasked with responding to the public health crisis, assuring citizens he was taking care of remediating the crisis, and fielding questions about his role in the crisis. The public was eager to know what Governor Snyder's role was in the crisis and why it had taken so long to respond. Calls for his resignation abounded. Some suspected he had known about the crisis long before October 1st but had tried to cover it up. At a press conference on January 6th, 2016 a reporter bluntly asked Governor Snyder "what did you know and when did you know it?" Governor Snyder refused to give specific details and indicated that the reporters would have to for the publication of the Flint Water Advisory Task Force's *Final Report* as "we're going to do this in a comprehensive fashion, not a piecemeal fashion" (Rappleeye). All Governor Snyder would tell reporters is that he did not know about the lead contamination until October 1st, 2015 and that he took immediate action. The public would have to wait for the Flint Water Advisory Task Force's *Final Report* for more details about who was responsible for the crisis and how it had been allowed to continue for so long.

In the meantime, on January 20th, Governor Snyder released nearly 300 emails his administration had received during the years 2014-2015 regarding the water in Flint. Governor Snyder claimed the release of emails was a good faith act of transparency, but he chose not to release the emails he had sent and many of the emails that were released were heavily redacted. Without access to Governor Snyder's emails, it is difficult to know for sure what he knew and when he knew it, but the emails suggest he was aware of high lead-levels in Flint in September of 2015, a month before he made an official announcement. The emails, furthermore, showed that he and top aides were aware of problems with Flint's water since at least October 1st, 2014 when the

Michigan Department of Environmental Quality submitted a briefing to the Governor's office about recent boil water notices due to high trihalomethane levels—a disinfectant byproduct—in the city's water. Shortly after, on October 14th, 2014, Valerie Brader, State Deputy Legal Counsel and Senior Policy Advisor, emailed Governor Snyder's then Chief-of-Staff Dennis Muchmore and other top aides arguing Flint should return to The Detroit Water and Sewerage Department because of water quality problems. Michael Gadola, the Governor's Legal Counsel, responded to the email by agreeing with Brader. On March 13th of 2015, Brad Wurfel from the Michigan Department of Environmental Quality emailed the Governor's office noting (but dismissing) an uptick in Legionella cases. Further, on July 22nd, Dennis Muchmore emailed the director of the Michigan Department of Health and Human Services expressing his frustration that

I really don't think people are getting the benefit of the doubt. Now they are concerned and rightfully so about the lead level studies they are receiving from the (Michigan Department of Environmental Quality) samples. [...] These folks are scared and worried about the health impacts and they are basically getting blown off by us (as a state we're just not sympathizing with their plight). (Wisely)

The emails did not indicate that Governor Snyder had known that the city's water was contaminated with lead, but they did show that he and others at the highest levels of the state government were aware of ongoing concerns about the city's water quality. The emails lent support to critics who argued that Governor Snyder should have acted sooner.

As the Flint Water Advisory Task Force was completing their investigation, The United State Justice Department began its own investigation into the Flint water crisis. On February 3rd, 2016 the House Oversight and Government Reform Committee began their hearings on the crisis and, throughout their investigation, took testimony from the EPA acting deputy assistant

administrator Joel Beauvais, Dr. Marc Edwards, Michigan Department of Environmental Quality Director Keith Creagh, LeeAnne Walters, EPA regional administrator Susan Hedman, Ex-emergency Manager Darnell Earley, Former Flint Mayor Dayne Walling, Governor Snyder and EPA Administrator Gina McCarthy. The hearings were live streamed on MLive, C-Span, and on several YouTube channels. On March 17th, 2016, Governor Snyder was requested to testify before the committee. The hearing was, in many ways, a referendum on Governor Snyder's ability to govern and during the hearing several officials called on him to resign. Governor Snyder, however, throughout his testimony remained defensive and distributed blame. In his opening testimony, for example, he claimed the crisis "was a failure of government at all levels. Local, state, and federal officials—we all failed the families of Flint" (8). Governor Snyder was adamant he responded appropriately to the crisis and when questioned about when he became aware of the lead contamination he insisted "it was on October 1, 2015, that I learned our state experts were wrong. Flint's water had dangerous levels of lead. On that day, I took immediate action." (8). Democratic Congressman Matt Cartwright expressed what many no doubt felt when he told him that "plausible deniability only works when it's plausible and I'm not buying that you didn't know about any of this until October 2015. You were not in a medically induced coma for a year and I've had about enough of your false contrition and phony apologies" (20). While Governor Snyder may not have been convinced until October 1st, 2015 that the water in Flint was contaminated with lead he was aware of problems with the water and of evidence that suggested high lead levels long before then.

When questioned further about when he had become aware of the crisis, Governor Snyder acknowledged he had been aware of citizen concerns and numerous signs something was wrong with the city's water but explained his inquiries to the Michigan Department of Environmental Quality were repeatedly met with assurances that the problems with the water were not serious and

that the water was safe to drink. Many members of the committee were not satisfied with Governor Snyder's unwavering reliance on the officials at the Michigan Department of Environmental Quality and repeatedly pressed him to accept responsibility for not realizing they were wrong. A defensive Governor Snyder exasperatedly explained that the water crisis was not solely the state's fault:

we messed up in Michigan to begin with by doing two studies instead of corrosion controls. That fundamentally caused this problem. I have accepted responsibility because those people work for me. But it's something different to have this continuing dialogue, to say it was solely us. This could have been stopped sooner if other people had also spoken out.

(42)

Throughout his testimony Governor Snyder failed to acknowledge that people—the citizens of Flint—had been speaking out all along but he did not listen to them and chose, instead, to listen exclusively to officials at the Michigan Department of Environmental Quality.

During the testimony, Governor Snyder was asked what he thought had led to the water crisis. According to Governor Snyder, the Flint water crisis occurred not because of his unwavering faith in the experts at the Michigan Department of Environmental Quality, but because bureaucrats at the agency had “created a culture that valued technical competence over common sense and the result was that lead was leaching into residents' water.” In blaming the Michigan Department of Environmental Quality for its culture, Governor Snyder fails to acknowledge that a culture that valued technical competence over common sense was not limited to the Michigan Department of Environmental Quality but was pervasive among the various state agencies and the Governor's office as well and that he, as the executive administrator of the state, was responsible for overseeing the culture across these state agencies. The Flint Water Advisory Task Force

released their *Final Report* just four days after Governor Snyder's testimony. The report is prefaced with a letter addressed to Governor Snyder and dated March 21st, 2016. In this letter the task force informs Governor Snyder

we are encouraged by your focus and expressed commitment to address the Flint community's needs, and to learn from the failures that have transpired. This commitment is appropriate because, though it may be technically true that all levels of government failed, the state's responsibilities should not be deflected. The causes of the crisis lie primarily at the feet of the state by virtue of its agencies' failures and its appointed emergency managers' misjudgments. (1)

The Flint Water Advisory Task Force's *Final Report* definitively places responsibility for the crisis with Governor Snyder. Regardless of the actions of those at the city, state, and federal level, it was Governor Snyder's responsibility to have known that the water in Flint was contaminated. While the task force places responsibility where it belongs, it bases this decision upon a technicality—that he was the executive administrator at the time of the crisis—rather than on his administration's failure to allow citizens to participate in democratic discussion and debate about the issues that affect their lives.

Formal Analysis of the Flint Water Advisory Task Force's *Final Report*

The following analysis of the *Final Report* of the Flint Water Advisory Task Force is based upon the scholarship of those who have established that genres mediate thinking and have a social impact. Carolyn Miller, in her groundbreaking article "Genre as Social Action," defines genres "as typified rhetorical actions based in recurrent situations" (31) and argues that genres do not simply reflect recurrent situations but participate in the construction of the situations to which they respond. The genres that emerge in response to recurrent situations, Miller explains, shape the way individuals understand and respond to these situations. Along similar lines, Charles Bazerman, in *Constructing Experience*, explains that the genres "that the writer applies to the situation create a kind of habitat for the writer to inhabit both psychologically and socially. That is, typifications

give writers symbolic means to make sense of things; in turn, those means of sense-making help set the stage and frame possible action” (19). Bawarshi & Reiff, likewise, argue that the contexts in which genres function

are not merely backdrops or frames within which genres and actions take place. Instead, contexts exist in a dynamic, inter-dependent, mutually-constructing relationship with the genre systems they situate so that through the use of genres and other mediational means, we enact context as we function within it. (95)

This analysis of the Flint Water Advisory Task Force’s *Final Report* is particularly indebted to Carolyn Rude’s analysis of the report for decision making and her understanding that “the approach to decision making—as guided, in part, by genre knowledge—shapes the quality of decisions. Shortsighted decisions result in part from inadequate procedures of inquiry and communication” (171). It is with the understanding that inadequate procedures of inquiry and communication will lead to inadequate recommendations that I turn toward a formal analysis of the Flint Water Advisory Task Force’s *Final Report*.

Report genres are one of the most widely used genres in workplaces and institutions and shape decisions at all organizational levels yet, as Carolyn Rude points out,

conventions for structuring reports for decision making are far less fixed than those for correspondence, instructions, proposals, and scientific reports. No standard outline beyond the introduction-discussion-conclusions structure provides a dependable formal concept of the report for decision making to serve in the place of ready examples. (170-171).

The Flint Water Advisory’s *Final Report* generally follows an IMRD (Introduction, Methods, Results, and Discussion) structure that is typical of reports for decision making. The *Final Report* is comprised of the following five sections: Executive Summary, Background, Roles of

Government Entities in the Flint Water Crisis, Issues Presented by the Flint Water Crisis, and Conclusions. Within the Roles of Government Entities section, the report provides subsections on the Michigan Department of Environmental Quality, MDHHS, Michigan Governor’s Office, State-Appointed emergency managers, City of Flint, Genesee County Health Department, and the USEPA. Within each of the four main sections the report provides the defined role of each of these entities followed by a discussion, its findings, and its recommendations. The Issues Presented by the Emergency Manager Law section is the only section that veers from this structure. The Issues Presented by the Flint Water Crisis section includes four subsections. The Reality of Environmental Justice subsection includes a Discussion and Findings component, The Perspectives from Flint subsection stands alone, the Flint Recovery-Remediation subsection includes Recommendations component as does the State-Wide Initiatives subsection. While the *Final Report* generally follows an IMRD structure, it does not include a methods section. This is atypical of a report genre. The methods section is an important component of the report for decision making. The methods section explains to the reader how the authors gathered their data and provides insight into the reasons behind their choices. Because there is no formal methods section, a formal analysis of The Flint Water Advisory Task Force’s *Final Report* reveals its purpose and method in its structure and substance and gives insight into its criteria for evaluation and selection.

In their letter to Governor Snyder, the task force explains that their “report builds on the ample public record and information yielded through over 60 interviews and discussions to prescribe recommendations that, we hope, will ultimately safeguard and benefit residents for years to come” (1). Throughout the report, the task force makes frequent references to the emails Governor Snyder had released in January of 2016 and their timeline references newspaper sources, permits, timelines from the city and Governor Snyder’s office, and Marc Edwards’ blog site.

Appendix III indicates they interviewed 63 people, only three of whom were Flint residents. The remainder were water quality and health experts, politicians, decision makers at various levels of government and agencies.

The Summary Timeline of Key Events included in the Background section of the *Final Report* provides insight into the events the task force felt were (and were not) important factors. The timeline includes 63 events spanning from 1967 when the city of Flint first enters into a water supply contract with the Detroit Water and Sewerage Department to October 16th, 2015 when Flint switched back to the Detroit Water and Sewerage Department. The timeline leaves out many important events that are commonly included on similar timelines. The timeline included in the *Final Report*, for example, does not include Walters' August 4th, 2015 meeting with top Snyder aides and Michigan Department of Environmental Quality officials at the Capitol to discuss the memo Miguel Del Toral, the regional director of the EPA, leaked providing details about Flint's failure to implement the required corrosion control and his suspicion this was leading to widespread lead poisoning. The timeline also does not mention that on July 22nd of 2015, six months before Governor Snyder declared a state of emergency over the high lead levels in the water in Flint, in which Snyder's then chief-of-staff, Dennis Muchmore, wrote an email to a top health department staffer saying that he was frustrated by the water issue in Flint and felt that the city was getting "blown off" by the state. The timeline, further, leaves out many important dates regarding state-appointed emergency management in Flint. The timeline does not include the date Flint was declared to be in financial emergency or the dates Governor Snyder appointed emergency managers Michael Brown, Ed Kurtz, Michael Brown once again, Darnell Earley, and Jerry Ambrose. It does not include that in 2011 Michael Brown first suggested switching from the Detroit Water and Sewerage Department to the Flint River. Also missing from the timeline is that

on January 12th of 2015, Detroit offered to reconnect Flint to the Detroit Water and Sewerage Department and waive the \$4 million connection fee, but that on January 29th of 2015 Jerry Ambrose, the presiding emergency manager, declined Detroit's offer, citing the additional \$1 million a month cost of buying water from Detroit.

The language the task force uses when discussing who is to blame for the Flint water crisis is evidence that the task force faults the Michigan Department of Environmental Quality more than Governor Snyder for the crisis. Throughout the report, the task force makes it clear that the Michigan Department of Environmental Quality is "responsible" for the crisis while the state administration is "accountable." In making a distinction between who it finds primarily "responsible" for the crisis and who it finds primarily "accountable," the report distinguishes between who is at fault for the actions that led to the crisis—the Michigan Department of Environmental Quality—and who must answer for those actions—the Michigan Governor's Office. In addition, the task force primarily uses the passive voice when presenting its findings and recommendations regarding the Michigan Governor's Office and the active voice when presenting its findings and recommendations for the Michigan Department of Environmental Quality. Each of the five findings regarding the Michigan Department of Environmental Quality begins with "MDEQ" and is followed closely by an active verb (e.g., "MDEQ bears primary responsibility," "MDEQ [...] suffers from cultural shortcomings," "MDEQ misinterpreted the LCR and misapplied its requirements," "MDEQ waited months," "MDEQ failed to move swiftly") (6). By clearly identifying the subject and using active verbs, the task force highlights the Michigan Department of Environmental Quality's actions and places responsibility directly with the agency. In contrast, when the task force discusses the Michigan Governor's Office it is often difficult to pinpoint the actor. For example, within the Michigan Governor's Office subsection of the Findings

of the Task Force, the report claims, “the Flint water crisis highlights the risks of over-reliance—in fact, almost *exclusive* reliance—on a few staff in one or two departments for information on which key decisions are based” (7). It is not clear from this sentence who was doing the over-relying--Governor Snyder or the Governor’s Executive Staff. At another point in this section the task force claims

the suggestion made by members of the Governor’s executive staff in October 2014 to switch back to DWSD should have resulted, at a minimum, in a full and comprehensive review of the water situation in Flint, similar to that which accompanied the earlier decision to switch to KWA. It was disregarded, however, because of cost considerations and repeated assurances that the water was safe. (7)

It is not clear from this section if it was Governor Snyder or his executive staff who disregarded making a full and comprehensive review of the water situation in Flint. Once again, the task force in the Findings of the Task Force section state that “Official state public statements and communications about the Flint water situation have at times been inappropriate and unacceptable” (7). This hedging stands in direct contrast to the task force’s directness when it comes to its findings within the findings within the Michigan Department of Environmental Quality subsection of the same section.

The organizational structure of the Flint Water Advisory Task Force’s *Final Report* highlights the actions of individual agencies/entities but simultaneously obscures the State of Michigan’s integral role in bringing about the failure of democracy that contributed to the Flint water crisis. The Flint Water Advisory Task Force divides the Roles of Government Entities into the following categories: Michigan Department of Environmental Quality; MDHHS; Michigan Governor’s Office; State-Appointed emergency managers; City of Flint; Genesee County Health

Department; and the USEPA. Separating the Michigan Governor's Office from the Michigan Department of Environmental Quality, the Michigan Department of Health and Human Services, and the State-Appointed Emergency Managers creates a greater distinction between the various state agencies/entities and the Michigan Governor's Office than exists. Indeed, the Governor appoints and oversees the head of the Department of Environmental Quality and Michigan Department of Health and Human Services and the emergency managers. Providing separate findings and recommendations for the Michigan Department of Environmental Quality, Michigan Department of Health and Human Services, and the state-appointed emergency managers obscures the fact that these agencies all fall under the umbrella of the state government.

The fact that the task force discusses Emergency Management separate from the Office of the Governor is particularly problematic as emergency management is deeply intertwined with state governance. The decision to switch from The Detroit Water and Sewerage Department to the Flint River was made under the direction of two different emergency managers, both of whom were appointed by Governor Snyder. Pursuant to Michigan's so-called Emergency Manager Law, Public Act 436, only the Governor of Michigan can place a city in receivership. When the governor appoints an emergency manager, all power is removed from locally elected officials and is given to the emergency manager. An emergency manager is afforded vastly more power than a mayor or a city council, which allows for the emergency manager to unilaterally eliminate local ordinances and laws, sell city assets, modify or break collectively bargained contracts, consolidate or dissolve municipalities, and recommend to the governor that a community file for bankruptcy. The emergency manager reports directly to the governor. The task force critiques emergency management and, in the State-Appointed Emergency Managers subsection of the Roles of Government Entities in the Flint Water Crisis section, recommends the law be reviewed to

“compensate for the loss of the checks and balances that are provided by representative government” and acknowledges that

while some of the checks and balances inherent in democratic decision-making are necessarily and by definition absent under emergency management—as is also true under bankruptcy—proper and efficient checks and balances per se should not be a casualty of state receivership. Neither should avenues for citizens to voice their concerns, particularly regarding matters of public health and safety. (41-42)

The task force is critical of Michigan’s current Emergency Manager law, but it does not recommend a radical re-envisioning of the law. Instead, it recommends that the state consider creating an Ombudsman at the state level to “ensure that local concerns are a factor in decision making by the EM” and/or to “ensure proper support and expertise for EMs to effectively manage the many governmental functions of a city” (42). These recommendations are inadequate. If implemented, they would not provide citizens with an opportunity to participate in the discussion and debate about important issues—the very thing that led to the crisis in the first place.

Participatory Criteria and Reports for Decision Making

In the conclusion to its *Final Report* the Flint Water Advisory Task Force reflects on the value of its work. According to the task force,

The value in documenting what went wrong is not to ascribe blame for blame’s sake, but to establish the foundation for moving forward, both in Flint and throughout the state. The state clearly must respond with dedicated and systematic attention to health concerns for people of Flint. But it also has the opportunity to demonstrate that lessons have been learned from the Flint experience—as traumatic as it has been and will continue to be—and develop model infrastructure renewal and public health programs that will serve all Michigan residents for generations to come. Flint residents and their fellow Michigan citizens deserve no less. (62)

Analyzing the events that led to the crisis to make changes to develop model infrastructure renewal and public health programs is, no doubt, important. Citizens deserve access to safe water and for agencies to effectively oversee the identification of and response to contaminated water. To prevent a future tragedy like the Flint water crisis from occurring in the future, however, the state must also come to a better understanding of the tragic consequences possible of curtailing democratic participation. The *Final Report* of the Flint Water Advisory Task Force does not, unfortunately, ask them to do so.

The Final Report criticizes Snyder for listening to only a handful of people about the water problems in Flint and concludes “the Flint water crisis highlights the risks of over-reliance—in fact, almost exclusive reliance—on a few staff in one or two departments for information on which key decisions were made” (38). The report urges the governor to look to more people for information and advises he

create a culture in state government that is not defensive about concerns and evidence that contradicts official positions, but rather is receptive and open-minded toward that information. View informed opinions—even if critical of state governments—as an opportunity for re-assessing state positions, rather than as a threat. (38-39)

This recommendation is crucial. Throughout the year-and-a-half leading up to the exposure of the water crisis the Michigan Department of Environmental Quality and Michigan Department of Health and Human Services insisted they were correct and did not question themselves even when confronted with evidence from outside experts. In fact, both the Michigan Department of Equality and the Michigan Department of Health and Human Services responded to outside experts with hostility. As the Flint water crisis unfolded, the Michigan Department of Environmental Quality and Michigan Department of Health and Human Services defended the decision to switch to the

Flint River and resisted a return to The Detroit Water and Sewerage Department by repeatedly discrediting accurate information about lead in the drinking water and elevated blood levels provided by outside experts. When Miguel Del Toral at the regional EPA office leaked a memo providing details about what he believed was happening with the water supply in Flint and how it was likely there was particulate lead in Flint's water due to the local treatment plant's failure to employ corrosion control officials at the Michigan Department of Environmental Quality dismissed his findings. They questioned his credibility and portrayed him as a "rogue" employee who was trying to make trouble within the organization. Despite the memo, they continued to tell citizens the water was safe to drink and refused to do follow up testing. When Mark Edwards, a civil engineering professor from Virginia Tech, shared with the EPA his findings from wide-scale testing of the city's water that supported Del Toral's suspicions that the lead levels in Flint were above the allowable limit state officials responded by downplaying the lead risk and claimed the Virginia Tech team was not credible. Brad Wurfel, the Communications Director for the Michigan Department of Environmental Quality, told a reporter that

the state DEQ is just as perplexed by Edwards' results as he seems to be by the City's test results. When I said we were unsure how the Virginia Tech team got its results, that's not the same as being surprised that they got them. This group specializes in looking for high lead problems. They pull that rabbit out of that hat everywhere they go. Nobody should be surprised when the rabbit comes out of the hat, even if they can't figure out how it is done. While the state appreciates academic participation in this discussion, offering broad, dire public health advice based on some quick testing could be seen as fanning political flames irresponsibly. Residents of Flint concerned about the health of their community don't need more of that. (Flint waterstudy.org Commentary: MDEQ Mistakes and Deception Created the Flint Water Crisis).

State officials at the Department of Health and Human Services as well discredited the work of outside experts. When Dr. Hannah Mona-Attisha identified an uptick in blood lead levels in the city's children they never questioned their own results and stood by their data. They insisted there was no increase in the blood lead levels of children in Flint and that Mona-Attisha's studies were

flawed when it was really their own studies that were flawed. If the state and its agencies had been more willing to listen to outside experts the crisis would have been exposed much sooner and the effects of the tragedy would not have been as severe. The task force's recommendations, however, do not suggest a change in policy or procedures that would require state agencies and entities to listen to outside experts but simply that Snyder create a less defensive state culture that is more open and willing to listen to others. This is, no doubt, a point worth pursuing. Simply changing the cultural climate, however, does not have the more robust and lasting effect as a policy change.

The task force recommends creating a state culture that is more receptive of outside experts but does not mention the need to be receptive to citizens. In the context of the Flint water crisis this is a glaring omission. Dewey's response to Lippmann in their debate about the extent to which citizens should be involved in decision making sheds light on the inadequacies of the Flint Water Advisory Task Force's findings and recommendations. While Lippmann believes experts should be made central to decision making and citizens should be limited to voting officials in and out of office, Dewey argues citizen participation is integral to decision making. Unlike Lippmann, who believes experts can identify and solve public problems without input from the citizens Dewey argues that when experts "become a specialized class, they are shut off from knowledge of the needs which they are supposed to serve" (206). According to Dewey, public issues are socially created, and, as such, cannot simply be uncovered by experts as "a class of experts is inevitably so removed from common interests as to become a class with private interests and private knowledge, which in social matters is not knowledge at all" (207). According to Dewey, the only way to solve public problems is for experts, officials, and citizens to communicate and work together for the public good. The Flint water crisis is an example of the tragic consequences possible when citizens are not allowed to participate in decision making. Indeed, if the state had allowed citizens to

participate in the discussions and debate about their water supply the Michigan Department of Environment Quality's failure to correctly treat the city's water would have been exposed much sooner and the extent of the crisis would have been limited. The Flint water crisis lends support to Dewey's argument for the "improvement of the methods and conditions of debate, discussion and persuasion" (208) rather than its removal.

To improve democratic communication, the genre of the report for decision making should be broadened to encompass a consideration of democratic participation. Rude's analysis of the report for decision making provides a productive starting point for thinking through the way this genre can be modified. According to Rude, the form for reports for decision making are often inadequate—and hence lead to inadequate findings and recommendations—because they are based upon "managerial" criteria (e.g., costs, time required, staffing, training, market, etc...) and "technical" criteria (e.g., physical space, technology, legal restrictions, materials, etc...) and ignore the "social" criteria (human safety, gender, race, age, ethical issues, human impact, environmental impact). To develop better findings and recommendations, authors of reports for decision making, Rude argues, must develop their inquiry based upon social criteria to prompt

attention to issues that might not emerge for someone who thinks just in terms of cost or whose concept of cost is limited to purchase cost. Using three categories of criteria, instead of one or two, elevates social issues—ethics, quality and safety—as well as long-term impacts. (199)

Rude suggests that technical communication instructors should encourage students to adopt what she calls a "rhetorical method for practical decision making" when writing reports for decision making. To do so, instructors, she argues, should ask students to develop their inquiry using managerial, technical, and social criteria. The result is that social issues would become integral to

reports for decision making as students would bring this genre knowledge with them to the workplace. In other words, encouraging students to base inquiries, in part, on social criteria would create a change in the genre of the report for decision making that would lead to policies and decisions that better address social issues.

While Rude’s heuristic is promising, The Flint Water Advisory Task Force’s *Final Report* suggests that basing reports for decision making upon social criteria is not enough to ensure adequate findings and recommendations. Indeed, the task force’s findings and recommendations do not adequately address the removal of citizen participation that provided the underlying framework for the crisis to occur even though it was guided by social as well as managerial and technical criteria. The *Final Report* of the Flint Water Advisory Task Force exhibits an overriding concern with social issues. In their prefatory letter to Governor Snyder, the task force explains they have “approached our work with a solemn commitment to the charge you invested in us: to place Michigan residents’ well-being first (1). Throughout the report, as well, it is evident that the task force’s inquiry is driven, in part, by social criteria. For example, the task force determines that

regardless of any successes of the EM process in other Michigan cities, this failure must force us to review the EM law and the general approach to financial problems. Government approaches to cities in fiscal distress must balance fiscal responsibility with the equally important need to address quality of life, economic development, and infrastructure maintenance and provision. (40)

The Task Force, as well, recommends the Governor’s Office ensures “that communications from all state agencies are respectful, even in the face of criticism, and sensitive to the concerns of diverse populations” (11). Throughout the *Final Report*, the task force’s primary concern is with the health and well-being of the citizens of Flint and the State of Michigan.

The task force’s inquiry is motivated by social criteria, but its discussion of social issues is not integrated throughout the *Final Report* and, instead, occurs primarily in a discrete section at the end of the report separate from the discussion of responsibility of various entities and agencies responsible for the crisis. The final section of the *Final Report*—The Issues Presented by the Flint Water Crisis—explores the implications of the water crisis from a social standpoint. This brief, five-page section discusses Environmental Injustice, Perspective of Parents, Non-English-Speaking Flint Residents, African American Seniors, and the Flint Community Leaders, and provides mid-term and long-term recommendations for remediation. In the Reality of Environmental Justice subsection of the Issues Presented by the Emergency Manager Law, the task force declares that

the facts of the Flint water crisis lead us to the inescapable conclusion that this is a case of environmental injustice. Flint residents, who are majority black or African American and among the most impoverished of any metropolitan area in the United States, did not enjoy the same degree of protection from environmental and health hazards as that provided to other communities. Moreover, by virtue of their being subject to emergency management, Flint residents were not provided equal access to, and meaningful involvement in, the government decision making process. (54)

The section of the report that discusses environmental racism is only two pages long and offers the single recommendation that Governor Snyder “Issue an Executive Order mandating guidance and training on Environmental Justice across all state agencies in Michigan, highlighting the Flint water crisis as an example of environmental justice” (55). The task force identifies that the Flint water crisis is a case of environmental injustice, but its recommendations for combatting this is incomplete, unsatisfactory, and altogether too simplistic to adequately address the complex problem of environmental justice in the State of Michigan that contributed to the Flint water crisis. The brevity with which the *Final Report* addresses the social injustice of the crisis as well as the fact that this discussion occurs at the end of the report separate from the discussion about who is

responsible for the crisis suggests that social issues are secondary to discovering the agencies/entities responsible for the crisis.

The Flint Water Advisory Task Force's *Final Report* highlights the need for reports for decision making to be guided by participatory as well as social, managerial, and technical criteria. Encouraging students in technical communication courses to develop their inquiries based upon a participatory criterion would prompt students to ask questions such as: who has (and does not have) access to decision making, how has the access (or lack of access) to participation in decision making effected outcomes, what grants those who are able to participate in decision making the access to doing so, what prevents those who are not able to participate in decision making from doing so. A participatory criterion would also prompt students to question if their own inquiry adequately gathers information from various stakeholders, for example, through interviewing those who are affected by decision making as well as those who are in the position to make decisions. Encouraging students to base their inquiry upon such questions has the potential to shift the genre of the report for decision making, thereby leading to public and institutional policies that better understand the importance of citizen participation.

The Flint Water Advisory Task Force Committee was motivated by a concern for citizens' well-being and, as its declaration that the tragedy was an instance of environmental injustice shows, was well-aware of the fact that social injustices contributed to the water crisis. If citizen participation had been a criterion upon which they based their inquiry it is likely they would have developed much different findings and recommendations. If a concern for citizen participation as well as managerial, technical, and social aspects had guided their inquiry they would, most likely, for example, have interviewed more than three residents and would, almost certainly, have interviewed LeeAnne Walters. Doing so would have led them to develop a more urgent

understanding of the full extent of the State's responsibility for the crisis and the way that emergency management, the Office of the Governor, and the Michigan Department of Environmental Quality made it nearly impossible for citizens to participate in discussions about their water quality and safety. It is true that the city, state, and federal government all failed the citizens of Flint, but it was the state that made it impossible for citizens to speak and be heard. Basing reports for decision making upon participatory as well as managerial, technical, and social criteria would highlight the need for public and institutional policies to support rather than remove democratic communication and would go a long way toward preventing a future tragedy like the Flint water crisis.

CHAPTER 5: “LESSONS FROM THE FLINT WATER CRISIS

In Flint, there is a large block of concrete known as “The Rock” that residents paint with messages and cover in graffiti. In January of 2016, several citizens painted “YOU WANT OUR TRUST?? WE WANT VA Tech!!!” with PSI—Professional Services Industries—the company the city had planned to hire to perform independent water tests—circled in red with a line through it. The City heeded their wishes and hired Edwards and his Virginia Tech team to perform the independent water testing. Governor Snyder appointed Edwards, on January 27th 2016, along with 16 other medical and field experts to the newly created Flint Water Interagency Coordinating Committee to make “recommendations regarding the health and welfare of people exposed to lead, study Flint’s water infrastructure, and determine potential upgrades, review Flint Water Task Force recommendations, and establish ways to improve communication between local and state government” (*Michigan.gov*). The Environmental Protection Agency also contracted Edwards and his research team to complete the water testing they had begun in early 2016. The decision to make Edwards integral to the remediation of the Flint water crisis made sense. In the months following the exposure of the Flint water crisis, the citizens who had, understandably, lost faith in the EPA and the State of Michigan, and its agencies, trusted only Edwards to assess their water. If, however, city, state, and federal officials believed making Edwards integral to the remediation efforts would restore citizens’ faith in state officials and agencies, they were bound to be disappointed.

Throughout the two-and-a-half years following the exposure of the crisis Edwards and local activist groups have engaged in a series of progressively escalating clashes, and many citizens have lost faith in Edwards. Most citizens want the state to replace the city’s entire water system at an estimated cost of \$1.5 billion, but Edwards has maintained from the beginning that the existing system can be salvaged. In April of 2016, soon after the exposure of the crisis, Edwards declared

that the combined efforts of the City of Flint and the State of Michigan to switch back to the Detroit Water and Sewerage Department, treat existing supply lines, and begin the process of replacing lead lines throughout the city had brought the city to the “beginning of the end of the public health crisis in Flint” (Dolan “VTs Marc Edwards: Flint Is at Beginning of End of Water Crisis Disaster”). According to Edwards, his latest testing showed that lead levels in the system were improving and “the system is on its path to recovery” (Dennis). Edwards’ stance that the system was getting better and could be fixed dashed the hopes of many Flint residents who believe the water was continuing to cause health problems and desperately wanted the state to replace the city’s system. Indeed, Edwards’ claim that the system could be salvaged put an end to any serious discussion about replacing the system and the state has opted, instead, for the more affordable option of replacing the city’s 20,000 known lead lines between 2016-2020.

The hostility between Edwards and local activist groups culminated on May 10th, 2018 in the publication of a letter written by a group of local activists on the website *Flintcomplaints.com*. This letter, addressed to the “science and engineering communities,” asks for an investigation into Edwards’ work in Flint and is signed by 61 Flint residents and 34 Non-Flint residents—some of whom had worked closely with Edwards in the Flint investigation. The letter claims that in the wake of the exposure of the crisis Edwards’ actions have “ended up taking Flint residents’ voice away and giving it to Mr. Edwards.” According to the letter, Edwards says he speaks for the citizens of Flint but “Flint residents have their own voice and have never asked Mr. Edwards to speak for us let alone take official action using our names instead of his own.”

The letter claims that

residents of Flint object to Mr. Edwards fighting his own petty and vicious fights against anyone and everyone he sees as a challenger or competitor, and against anyone and everyone Flint residents turn to for help other than himself, all under the guise of “protecting” and “saving” us, or “defending” science. This is dishonest, paternalistic and

exploitative and, we fear, used by Mr. Edwards to build his own professional and financial power. It also violates the most basic right that we have for self-determination

The letter concludes with the request for an “investigation that puts OUR voices at the center.”

Edwards has responded to the letter by filing, in July of 2018, a \$3 million defamation lawsuit against the authors. Only time will tell the outcome of the lawsuit, but, for now, it is clear that many citizens do not feel that making Edwards integral to the remediation efforts has provided them with an avenue toward meaningful participation in decisions about the water quality and safety.

I conclude this project, unfortunately, much as I began—concerned that citizens are not able to meaningfully participate in the decision about the city’s water quality and safety. Throughout this project, I have argued that democratic communication must allow for citizens’ input regarding technical issues such as water quality and safety. In chapter two, I established that Michigan’s emergency manager law provided the underlying framework for the tragedy and must be revised to allow for citizens’ input. In chapter three, I argued for more democratic citizen and expert relationships that invite rather than exclude citizens’ personal and observational knowledge alongside experts’ scientific and technical knowledge. Chapter four proposed that reports for decision making should be guided, in part, by inquiry into citizen participation. This chapter builds upon this work by arguing that Dewey’s concept of democratic communication provides a useful heuristic for developing democratic communicative practices that allow citizens and technical/scientific experts to communicate with one another about technical issues such as water quality and safety. I conclude this project by reflecting on what I can do to promote more democratic communicative practices within my institutional position as a communication professor at a private cooperative education and experiential learning-based university located in Flint, which offers degrees in STEM and business fields. Indeed, I stand little chance of persuading

the state of Michigan to revise its emergency management law—the law that provided the framework for the crisis to occur—or to revise the Safe Drinking Water Act—the policy that oversees the monitoring and treatment of public drinking water—to allow for citizens’ input regarding their drinking water. This does not, however, mean there is nothing I can do. I will first discuss theoretical changes that must be made to activist-oriented theories of institutional critique to allow for more meaningful citizen participation. I will then discuss pedagogic practices that can promote Dewey’s democratic communication. These discussions are intended to be generative rather than exhaustive and, I hope, will prompt others to reflect upon what they can do within their own institutional positions to work toward the democratic communication necessary to prevent future tragedies like the Flint water crisis.

Democratic Communication and the Dewey/Lippmann Debate

Dewey and Lippmann agree that representative democracy is not living up to its promise to allow citizens to participate in decision making. They disagree, however, with what should be done to rectify this problem. Lippmann believes the goals of representative democracy are impossible to meet and that it is destined to fail. The public, according to Lippmann, is too large and too diffuse to come to a collective will. Representative democracy is fundamentally flawed, then, according to Lippmann, because it asks officials to base their decisions upon the will of the public when there is no such thing. A large and disparate group of people, Lippmann argues, do not share the same opinions and the number of votes on a ballot tells us very little about what individuals actually think and want. The truth of the matter, according to Lippmann, is that the citizen goes “to the polls, receives a ballot on which a number of measures are printed, almost always in abbreviated form and, if he says anything at all, he says Yes or No. The most brilliant amendment in the world may occur to him. He votes Yes or No on that bill and no other” (232-

233). According to Lippmann, officials should not look to the public will when making decisions but should instead look to experts. Lippmann insists “the real sequence should be one where the disinterested expert first finds and formulates the facts for the man of action, and later makes what wisdom he can out of comparison between the decision, which he understands, and the facts, which he organized” (375). Lippmann argues that not allowing citizens to participate in decision making is not as problematic as many democratic theorists suggest. According to Lippmann, democratic theorists place too much emphasis on individual will and the supposed desire for citizens to participate in democratic decision making. The root of the problem with representative democracy, Lippmann claims, is that it assumes

that the expression of their will is the consuming passion of men, for they are assumed to possess by instinct the art of government. But as a matter of plain experience, self-determination is only one of the many interests of a human personality. The desire to be the master of one’s own destiny is a strong desire, but it has to adjust itself to other equally strong desires, such as the desire for a good life, for peace, for relief from burdens. (310)

Lippmann argues that “because the art of successful self-government is not instinctive, men do not long desire self-government for its own sake. They desire it for the sake of the results” (312). What is most important to individuals, then, is that their needs are met, not that they have a chance to participate in decision making.

According to Lippmann, in the rural society in which democratic theories were originally developed it was relatively easy for citizens to become well-informed about important local issues. Citizens in modern industrialized societies, however, can no longer hope to come to understand the vast number of important issues necessary to participate in decision making. Because experts were the only ones who could perceive the world as it really was, Lippmann argues, they must be made central to decision-making. Rather than limiting citizen participation, Lippmann believes a technocratic system allowed for improved representation as experts are able to represent those

“who are not voters, functions of voters that are not evident, events that are out of sight, mute people, unborn people, relations between things and people. He has a constituency of intangibles” (382).

Dewey agrees with Lippmann that the current problem with democracy is that modern industrial society has resulted in a fracturing of the public. According to Dewey,

there is too much public, a public too diffused and scattered and too intricate in composition. And there are too many public, for conjoin actions which have indirect, serious and enduring consequences are multitudinous beyond comparison, and each one of them crosses the others and generates its own group of persons especially affect with little to hold these different publics together in an integrated whole. (137)

Dewey, however, believes the public is simply in “eclipse,” not that a public will is a fictional ideal. The current crisis with democracy, Dewey argues, is not due to there being no such thing as a public will but is due to modernity obscuring what this will is. According to Dewey, the key to solving the problems with democracy, then, is not the removal of citizen participation but “discovering the means by which a scattered, mobile and manifold public may so recognize itself to define and express its interests (146). Citizen participation is an integral component of discovering the public will, Dewey argues, as the public will is socially created and cannot simply be uncovered by experts. According to Dewey,

while singular beings in their singularity think, want and decide, *what* they think and strive for, the content of their beliefs and intentions is a subject-matter provided by association. Thus man is not merely *de facto* associated, but he *becomes* a social animal in the make-up of his ideas, sentiments and deliberate behavior. *What* he believes, hopes for and aims at is the outcome of association and intercourse” (24-25).

Removing citizens from social construction of knowledge will not lead to good decisions, Dewey concludes, because it goes against the way knowledge is constructed.

Dewey argues that the only way to arrive at an understanding of the public will is providing citizens with opportunities to communicate with one another about important issues. The essential

need, Dewey argues, “is the improvement of the methods and conditions of debate, discussion and persuasion. That is *the* problem of the public” (208). The benefit of democracy, according to Dewey, is that it necessitates communication between individuals, experts, and officials to develop a public will. Democratic communication allows individuals to work together to attain a common goal and, according to Dewey, “without such communication the public will remain shadowy and formless, seeking spasmodically for itself, but seizing and holding its shadow rather than its substance. Till the Great Society is converted into a Great Community, the Public will remain in eclipse. Communication can alone create a great community” (142). The answer to the problems with democracy, then, is not to remove citizen participation, but to develop communicative practices that better allow citizens to participate in decision making.

Dewey and Lippmann’s different versions of democracy also require different versions of communication. Public debate and discussion is not important to Lippmann, as they are to Dewey, because democratic communication does not strive to collaboratively understand and solve public problems. Lippmann’s version of democracy requires citizens not to participate in discussions and debate, but to be able to make judgements about decisions that have already been made. According to Lippmann,

The outsider, and every one of us is an outsider to all but a few aspects of modern life, has neither time, nor attention, nor interest, nor the equipment for specific judgement. It is on the men inside, working under conditions that are sound, that the daily administrations of society must rest. The general public outside can arrive at judgements about whether these conditions are sound only on the result after the event, and on the procedure before the event. (400)

Lippmann’s proposed version of democracy requires experts and officials to provide justifications and for citizens to make judgements about those justifications. Lippmann’s system separates speakers and listeners, officials/experts and citizens. Officials and experts, according to Lippmann, assert their case and citizens/listeners are left to judge the adequacy of this case. Dewey’s proposed

version of democracy, on the other hand, requires experts, officials, and citizens to engage in persuading one another.

Lessons from the Flint Water Crisis

Toward More Democratic Activist-Oriented Theories of Institutional Critique

Activist-oriented interventionist methodologies of institutional critique that have emerged over the past twenty years in technical and professional communication provide an ideal space to work toward a Deweyan democratic communicative practice that better accounts for the importance of citizens' knowledge. While decisions about technical issues such as water quality and safety may seem too technical—and too important—to allow for personal experience and observation, the Flint water crisis establishes that allowing technical knowledge to exert a monolithic persuasive force does not necessarily lead to better decisions and, in fact, can have tragic consequences. This does not mean that technical knowledge is not important—it is—or that decisions about water supply and safety should be left to citizens' subjective knowledge—it should not—but that we need to rethink our understanding of institutional critique to understand the value of both technical knowledge and citizens' knowledge based upon personal experience and observations.

Porter et al., in their foundational article, “Institutional Critique: A Rhetorical Methodology for Change,” criticizes versions of institutional critique that point out institutional injustice but fail to provide pragmatic strategies to work against this. This research, they claim, has the undesirable tendency to portray institutions as monolithic and unchangeable. To work against this, Porter et al. suggest activist-oriented rhetoricians work for social justice by exposing spaces for resistance and productive action to emphasize that “though institutions are certainly powerful, they are not monoliths; they are rhetorically constructed human designs (whose power is reinforced by

buildings, laws, traditions, and knowledge making practices) and so are changeable” (611). The focus of institutional critique, then, according to Porter et al., is to examine

institutions as rhetorical designs—mapping the conflicted frameworks in these heterogeneous and contested spaces, articulating the hidden and seemingly silent voices of those marginalized by the powerful, and observing how power operates within institutional space—in order to expose and interrogate possibilities for institutional change through the practice of rhetoric. (631)

Scholars of institutional critique do not claim individuals have the power to solve institutional injustice, but convincingly argue that strategic micro-level institutional changes can sometimes have a significant impact on macro-level institutions.

Recent versions of institutional critique that have built upon the work of Porter et al. have proven integral for rhetoricians who wish to pragmatically intervene at the local level to create opportunities for social justice through increased citizen participation in decision making. Scholars of institutional critique, however, generally begin from the assumption that learning the discourse practices of technical experts is a prerequisite to participation in decision making about technical issues. Michele Simmons, for example, develops a heuristic that requires institutions and experts to acknowledge that citizens can participate in technical discussions and have valuable information to contribute but a prerequisite for this participation is that “citizens be able to articulate their concerns about the technical issues of policy in ways that are persuasive to experts” (130). Citizens, according to Simmons, must develop technical expertise and adopt “new and different literacy practices for participating in policy discussions” (130). Porter argues that technical communicators must “promote wide access to information” (8) to provide citizens with the information they need to educate themselves about technical issues and persuade decision makers. Grabill, in “Shaping

Local HIV/AIDS Services through Activist Research” for example, suggests professional writing researchers work to include more meaningful citizen participation by helping to change the processes by which policy gets made.

Institutional critique strives to provide pragmatic strategies to increase citizen participation. Blythe, et al., for example, argue for what they call CAR--citizen action research. In this approach, ethnographers “conduct research on behalf of citizens rather than with them” (7). Simmons suggests technical and professional communicators use their expertise to “bring about change by talking with designers of the technology or policy, by working with the public, or even by talking with elected officials such as senators and legislators” (161-162). Institutional critique strives to include citizens in decision making processes but its privileging of “objective” scientific and technical evidence over citizens’ personal experience and observations limits the extent of this participation. Working to expand citizens’ participation in decision making is important, but institutional critique is unnecessarily limited by its insistence that technical knowledge is a prerequisite to meaningful participation in decision making. Indeed, an underlying goal of institutional critique, as Simmons puts it, is not just to ensure that citizens are included in the decision-making process, but “to flatten the current hierarchy between technical experts and publics—to the point that each becomes seen as a multiple stakeholder” (102). The goal may be to flatten the hierarchy between experts and citizens to allow both to participate in decision making, but by privileging technical knowledge over citizens’ knowledge based on personal experience and observations institutional critique contributes to the very hierarchy it is attempting to flatten. Insisting technical knowledge is a prerequisite to meaningful participation perpetuates the assumption that citizens have little to contribute to technical decision making.

Grounding institutional critique in materialist theories could allow for the development of democratic and ethical public policies that grant citizens' subjective knowledge more meaningful involvement in decision making about technical issues such as water supply and safety. A rhetorical practice grounded in a materialist institutional critique would provide—a broader range of pragmatic strategies... that would better account for, among other things, citizens' personal experiences, health, and observations. Simmons et al. acknowledge the potential value of Latour's actor-network-theory to critical rhetorical studies in "Tracing Uncertainties." They claim that "Latour helps us notice the obvious or mundane or unremarkable in a complex and networked world and give it more actants, more actions, more potential relations (ethical, political, social, and so on). Our work can be better when we do so" (290). They figure materialist practices, such as ANT as potentially useful to institutional critique, but not as integral and conclude that "its flexible practices [...] strengthen cooperating methodologies but only when ANT's time-consuming practices are warranted by the complexity of the study" (289). Making materialist rhetorical practices such as ANT integral to institutional critique, however, would allow for a rhetorical practice that better accounts for citizens' knowledge based upon personal experience and observation. Such a practice would not only be more just—though it would be that—but would also work to rectify the privileging of technical knowledge and exclusion of citizens' knowledge based upon personal experience and observations.

Rhetorical Listening and Writing Instruction

Dewey's democratic communication requires citizens, officials, and experts to enter into communication with a willingness to not only persuade but to also be persuaded as well. A democratic culture, then, requires citizens that are as adept at listening as they are in

speaking/writing. This does not mean that speech is not important—it is, but, as Cheryl Glenn and Krista Ratcliffe explain, that

individuals, as well as entire political parties, professions, communities and nations, can more productively discern and implement actions that are more ethical, efficient, and appropriate when all parties agree to engage in rhetorical situations that include not only respectful speaking, reading, and writing but also productive silence and rhetorical listening. (3)

Listening may not be the first thing that comes to mind when people think about teaching writing but listening promotes the kind of democratic communication that encourages individuals to better understand one another. As Krista Ratcliffe explains, “*rhetorical listening* signifies a stance of openness that a person may choose to assume in relation to *any* person, text, or culture” (emphasis in original 17). According to Ratcliffe, rhetorical listening requires an individual to occupy a space of openness “to cultivate conscious identifications in ways that promote productive communication” (25). Listening does not mean students must accept what the other is saying but that they must enter the communicative act with an openness and willingness to be persuaded. Listening to another does not require one to agree with the other but that they enter communicative acts with an openness and willingness to be persuaded.

To encourage students in composition courses to develop an openness and willingness to be persuaded it is important to provide students with writing tasks that ask them to understand the perspectives of others and to explore their own. This does not require a novel approach to writing instruction. A response essay, for example, is a common assignment in composition courses that asks students to not only respond to an article about a current public debate, but also requires them to show an understanding of the author’s perspective. Editorials, another common composition

assignment, as well, ask students to not only persuade others to accept their perspective, but to also identify and understand opposing views. Assignments that require students to write an argument from various perspectives, as well, provide students with an excellent opportunity to take various perspectives. Rhetorical analysis encourages students to pay particular attention to both an author's and audience's perspective to understand why some appeals are more effective for particular audiences than for others. Assignments that require students to think about their audience and to realize that their audience may have different expectations and perspectives than they do provides students with the opportunity to explore various perspectives. It is important, however, to explicitly foreground rhetorical listening as a component of the communicative process. It is also important to emphasize that rhetorical listening is active and requires individuals to interrogate their own perspectives. A good way to do so, as Julie Jung points out, is to encourage students to ask themselves such questions as "why am I so threatened by this speaker's argument? What is my personal/professional investment in defending that which this speaker challenges? In what ways are the speaker and I alike? In what ways are we different? How do these similarities and differences challenge my comfortable worldview?" (18). Exploring other perspectives alongside one's own is the first step toward developing the openness and willingness to being persuaded that democratic communication requires.

It is important to emphasize rhetorical listening in technical and professional writing as well as freshman composition courses. Indeed, those of us who teach technical and professional writing are uniquely positioned to increase citizen participation by encouraging future engineers, business professionals, and policy writers to understand the importance of developing democratic communicative practices that listens to various perspectives. Usability testing is one way to emphasize the importance of providing spaces for users to provide input and feedback.

Encouraging students to base their reports for decision making upon participatory criteria, as I have proposed in chapter 4, is another way to encourage technical and professional communicators to listen to diverse perspectives. Community-based learning courses are another particularly promising avenue toward promoting meaningful community engagement that requires an understanding of one's own perspectives, the ethics involved in partnering with community groups, as well as the importance of listening to members of the community. Such courses give STEM students the opportunity to work with the community and promote a commitment to utilizing technical and professional expertise to help improve communities by working with/for community members and could model for students (and citizens) a relationship between citizens and experts that does not privilege technical knowledge and exclude citizens' knowledge. I have recently partnered with an interdisciplinary group of academics to initiate a storytelling project in Flint. The goal of this project is to partner with Flint residents to create an archive of citizens' stories about the water crisis. This project will be mutually beneficial to students as well as residents. Students from Kettering University and the University of Michigan—Flint will help collect residents' stories and build an archive, and residents will help teach my students about the importance of listening to citizens' stories. The stories will be digitally archived and made accessible online, as well as serve as a community resource for Flint residents to identify for themselves the issues that matter to them most.

Conclusion

In line with Edwards' testing, the Michigan Department of Environmental Quality's July 18th, 2018 release of the results of their January 1st-June 30th, 2018 water tests indicate that 90 percent of samples are at or below 6 ppb, well below the federal action level of 15 ppb. The Michigan Department of Environmental Quality has announced that "two years of LCR [Lead and

Copper Rule] data show that Flint’s water is testing the same as or better than similar cities across the state” (Fonger “90 percent of Flint Water Samples at or Below 6 ppb of Lead”). While the lead levels in Flint have improved, the Flint water crisis is far from over. To remain below the federal action level many citizens in Flint must continue to use water filters and will do so for the foreseeable future. Residents are supplied with free water filters, which goes a long way toward preventing future lead exposure, but many residents may not be using the filters correctly. A March 2018 survey of 2,000 residents by the *Flint News* shows that “15 percent of respondents didn’t have a filter, while over a third weren’t confident in their ability to change the filter at the appropriate time” (Barrett). Inconsistent filter use and maintenance is a problem as the filters are only effective if used properly. Furthermore, while filters remove lead from water, they do not remove legionella bacteria—the waterborne bacteria that causes Legionnaire’s disease. This is a concern, as the lack of corrosion control that caused lead to leech from the city’s aging pipes also caused a deadly spike in Legionnaires’ disease in 2014 and 2015, and the city continues to struggle with maintaining chlorination levels needed to prevent legionella bacteria.

The public health crisis may be over, but residents are left struggling with its effects. As well as continuing health concerns, for example, many residents of Flint have been impacted financially. According to MarketWatch, median home “prices in Flint had risen from a 10-year low in April 2014 to \$46,700 in August of last year. But the water poisoning crisis at the end of December dropped selling prices to \$30,700” (Goldstein). Many residents, an overwhelming number of whom live below the poverty level, as well, had to bear the cost replace water heaters, dishwashers, washing machines, and indoor plumbing damaged by the corrosive water. Others are struggling to navigate their children’s behavior, attention, and learning problems in an already overburdened and underfunded special education program in their local school district. Still others

are scarred by the fetal deaths and miscarriages caused by the city's high lead levels. Indeed, a recent study estimates that the miscarriage rate in Flint spiked during the water switch and that among the babies conceived from November 2013 through March 2015, "between 198 and 276 more children would have been born had Flint not enacted the switch in water" (Grossman and Slusky). Still others are left to mourn the deaths of loved ones and suffer the health consequences of the 2014-2015 spike in Legionnaire's disease that sickened 87 and killed at least 12.

It would come as no surprise if the lasting legacy of the Flint water crisis is the residents' loss of trust in government officials. Indeed, many residents do not trust government officials any more than they trust the water. According to one resident, "I most definitely don't drink the water. I don't trust the people in office. If I went to Atlanta, I would still be hesitant to drink the water. I'm not saying there's anything wrong with the water. I just feel I can't trust anything" (Buncombe). Another resident explains that, "if you ask anybody in the city of Flint right now today, and they tell you they trust the water, they're either paid, or delusional from it" (Stephens). Another resident, Ariana Hawk, explains that "I don't trust the filter, I don't trust the water. Everything that me and my kids do from cooking to boiling their water for a bath, we're using bottled water, I do not trust anything" (Hybels). Leonard Fleming, a *Detroit News* reporter who has extensively covered the Flint water crisis, believes "it could take a generation or two for residents to trust the city and state again and its water" (Nicquel). It seems likely that Fleming's conjecture will prove correct as the State of Michigan has done very little to re-establish the trust lost in government officials and agencies, but, instead, continues to make decisions based upon scientific evidence and data rather than the citizens' wishes. On April 9th of 2018, for example, The State of Michigan quit providing the city with free bottled water, citing the Michigan Department of Environmental Quality's recent water tests. Mayor Karen Weaver, no doubt

expressed what many Flint residents felt when she called the Governor's decision insensitive and explained that "this is not the situation any of us want to be in. We did not cause the man-made water disaster, therefore adequate resources should continue being provided until the problem is fixed and all the lead and galvanized pipes have been replaced" (Zahara).

The greatest lesson of the Flint water crisis is, unfortunately, the one Governor Snyder has failed to learn—that citizens' input must be invited rather than excluded from decision making. It may seem logical to prevent citizens from participating in technical decisions about such issues as water quality and safety, but the Flint water crisis is an example of the tragic consequences possible when citizens are not allowed to participate in decision making. Indeed, the Flint water crisis occurred because Governor Snyder looked exclusively to experts for the information upon which he based his decisions, and, through Michigan's emergency manager law, removed citizens' opportunity to participate in decision making. The Flint water crisis occurred because of a failure in institutional communicative practices that must be rectified and highlights the need for the development of a communicative practice that allows experts, officials, and citizens to discuss, debate, and persuade one another about the best course of action. Such communication would go a long way toward preventing a tragedy like the Flint water crisis from occurring in the future by requiring individuals to not only speak but to develop the openness and willingness to listen to one another while moving forward to living a democratic life together.

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ABSTRACT**DEMOCRATIC COMMUNICATION: LESSONS FROM THE FLINT WATER CRISIS**

by

MINDY MYERS**December 2018****Advisor:** Dr. Richard Marback**Major:** English (Rhetoric and Composition)**Degree:** Doctor of Philosophy

This dissertation develops an approach to institutional critique that re-works Porter, Sullivan, Blythe, Grabill, and Miles' foundational configuration. This project argues that John Dewey's concept of democratic communication articulated in his debate with Walter Lippmann provides a useful heuristic for developing democratic communicative practices that allow citizens and experts to communicate with one another about technical issues such as water quality and safety. Through an analysis of Michigan's emergency manager law, the relationship between citizens and experts that exposed the crisis, and the Flint Water Advisory Task Force's Final Report, this dissertation establishes that citizens must participate in technical decision-making and makes pragmatic suggestions to increase citizens' meaningful participation. This project concludes with theoretical and pedagogical implications of a participatory institutional critique.

AUTOBIOGRAPHICAL STATEMENT

Mindy Myers grew up in Northern Michigan. She received her B.A. in English from Michigan State University, an M.A. in English Literature from the University of Wisconsin—Milwaukee, and an M.A. in English Composition and Communication from Central Michigan University.