

Michelle McMullin

Dissertation Committee: Dr. Bradley Dilger (Chair), Dr. Patricia Sullivan, Dr. Thomas Rickert, Dr. J. Blake Scott

SUMMARY

My project identifies new materialist methods for crafting interdisciplinary responses to complex problems by examining the Scott County, Indiana HIV outbreak. This study situates the initial outbreak in relationship to both the history of harm reduction policy and the work of local communities that continue to respond to the complex problems of opioid addiction and public health outcomes. By tracing how needle exchange policy emerged in response to the outbreak, and continues to be negotiated as the policy is implemented throughout Indiana, I better understand how emergent practices and the circulatory nature of technical communication can help us structure better community response.

The Scott County outbreak is a generative site for developing new materialist frameworks for technical communication research and problem solving for two reasons:

1. The outbreak is representative of the deeply entangled problems that new materialist and technical communication scholars have taken up as a pressing area for research where new methods are required for responding to technical, social, political and environmental concerns.
2. Crisis makes visible the embedded, often invisible infrastructure through which technical communication and professional practice circulates.

By mapping the assembled respondents, human and non-human, expert and non-expert, I illuminate what sustained, collaborative response to other wicked problems might look like. Cooperation to address complex problems is about technical communication, but *not only* about technical communication. I hope my research will help scholars and practitioners work more closely and communicate more effectively with more interdisciplinary and diverse audiences, contributing to critical scholarship that builds better communities.

MOTIVATIONS AND GUIDING INTERESTS

My questions and motivations for this study arise from my orientation to public rhetoric and technical communication, and from my industry experience in both operations and administration. I understand rhetoric as both ethical response (Davis, 2010) and as the energy that moves us to action (Kennedy, 1992). I am also concerned with the increasingly complex and divisive public problems to which our environmental, political, social and technological moment must respond. New materialist theory addresses this complexity, and provides method for study that engages wicked problems while encouraging cooperation and action. My research is grounded in technical communication because it operates in the intersections between kinds of knowledge and practice. Technical Communication is the media, the energy, the material practices and ontological frames that make work, and world making possible (Peters, 2015). My background in management and operations makes me keenly aware of infrastructure and procedure. My rhetorical training helps me understand the mundane infrastructures of operational decision making as deeply responsible for our capacities for acting in the world.

New materialist method, as I employ it in this project, begins with the idea that response to complex problems is both required, and situated in rhetorical invention and ethical praxis. Davis (2010) describes this, in part, as a judgement that “aims for justice.” She says, “Judgement with an eye toward justice could have no illusions of finality or universality...A judgement aiming for justice would necessarily take place as a tentative gesture, offering itself without clarity or certitude, both as a test and an invitation” (p. 127). At this place of both test and invitation, we must clear a space and work together to build ways for responding to the seemingly insurmountable. I believe technical communication should be integral to that work. Our research can and should be a site for participating with our communities and with other scholars and practitioners to both respond to immediate needs and develop more ethical, sustainable plans for addressing complex problems.

RESEARCH QUESTIONS

In this study, I pose and address the following research questions:

1. How do needle exchange laws and needle exchange policy implementations in Indiana work as a boundary object?
2. What evidence of boundary object formation or evolution can be seen by tracing Indiana needle exchanges as assemblages with emergent capacities? As boundary objects are stratified into processes and policies, which stakeholders are silenced or elided?
3. What methods make visible the “tacking back and forth” (Star, 1999) between tacit practices that allow for cooperation without consensus, and the stratification of policies without framing out the messiness of complex problems?
4. How can my research help develop frameworks for ongoing, collaborative research which allow technical communication researchers and practitioners to participate in interdisciplinary responses to complex problems?

CHAPTER OUTLINE

INTRODUCTION (CHAPTER ONE)

The introductory chapter frames a brief history of this project, its origins, and its influences, including a description of the political climate in Indiana at the time of the initial HIV outbreak. My way into this work, and the connections I made between public understanding, political will, and the nature of complex problems makes clear why new frameworks are needed, not only for studying complex problems, but for supporting collaboration and response. Response networks include a variety of stakeholders who share a desire to improve material conditions for communities, but often find themselves operating with competing goals, needs, and standards for what counts as evidence when researching and responding to problems.

MAKING SENSE OF THE OUTBREAK (CHAPTER TWO)

Chapter two begins with a sense-making approach (Star & Strauss 1999, Weick, 1999, 2005) to describing the initial outbreak, tracking events, and showing how the public health response in Scott County led to emergent practices, not just in Indiana, but at the Centers for Disease Control, and in other communities that are addressing a similar set of problems resulting from opioid addiction and IV drug use. This chapter focuses on mapping the timeline with attention to the sensitizing metaphors (Johnson, 2017) that come to define the public response to the outbreak. For example, key to developing a sustained public health response is a shift in approach from “stemming the outbreak” to “building a model for response.”

FRAMING NEW MATERIALIST METHODOLOGY (CHAPTER THREE)

Building from a description of Scott County as a local case through which to study complex problems, in chapter three I develop a framework for new materialist methodology by drawing on the work of new materialist theorists (Barad, 2007, Bennett, 2010, & Mol, 2002) an understanding of infrastructure (Star, 1999, 2010) network theory (Callon, et al, 2009, & Spinuzzi, 2005), and a critical approach to technical communication that includes both institutional critique (Porter, Sullivan, Blythe, Grabill, & Miles, 2000) and participatory design in technical communication (e.g. Opel & Hart-Davidson, 2017, Moore & Eliot, 2016). I argue for methods that incorporate the multiple threads new materialism to make visible the messiness of cooperation needed to respond to the material conditions of wicked problems in our communities.

RESEARCH DESIGN (CHAPTER FOUR)

My study methods combine qualitative methods of data collection and grounded coding (Saldana 2010, Clarke, 2003) with assemblage mapping (Angeli, 2018). This study includes four phases: data collection and document analysis, semi-structured practitioner interviews, secondary data analysis and follow up interviews, and collaborative mapping to identify possible methods for collaboration. Initial codes guide interviews with participants working in one of the largest syringe services programs in Indiana. Interviews are coded with the same categories used for document analysis, with attention to the differences in language and materials that show how information shifts from emergency response, to public policy, then back into the hands of practitioners. By describing my research choices in detail (Smagorinsky 2008, Meloncon, 2017) I demonstrate the validity of this approach, and continue a methodological discussion central to current technical communication research (McNeley, Spinuzzi, & Teston, 2015): what counts as evidence? How can we best collect data that make sense to technical communication researchers, practitioners, researchers in other fields, and the communities impacted by our outcomes?

MAPPING A DIFFRACTION PATTERN (CHAPTER FIVE)

Central to crafting methods for interdisciplinary response to complex problems is what Karen Barad describes as *diffraction*: reading evidence and theory through one another in order to make visible the “differences that make a difference” that allow for action and response. In this chapter I test a diffractive approach by analyzing documents related to the HIV outbreak as one set of data where codes emerge from identifying the materials, metaphors and objects; (i.e. needle exchange, public health emergency, disease diagnoses, response models) institutional positions; (i.e. Community health professionals, legislators, the State health department and CDC) and stakeholders’ orientations to response (i.e. community relationships, harm reduction, disease prevention). One early finding of my research traces “building a model for response” both as a sensitizing metaphor (Johnson, 2017) around which public information is organized and also as an operational directive that practitioners use to make decisions, build cooperative relationships, and design programs. Tracing how these metaphors for response organize information, align partnerships and allow for coordinated action across disparate stakeholders allows me to map not only which stakeholders are assembled in response to a problem, but those collaborative flows, where discussion about shared or conflicting metaphors might yield frameworks for co-operation, further research, and participatory response to the needs of our communities.

LOOKING FORWARD (CHAPTER SIX)

In the final chapter of this study I will look forward, highlighting follow up interviews with participants, indicating possible ways forward for this research, and most importantly outlining how a new materialist research method focused on collaboration and response might serve as a framework for addressing complex problems beyond harm reduction in response to the opioid epidemic.