

HEALTH MYTHOLOGIES: DEVELOPING AN UNDERSTANDING OF HEALTH MYTHS
AND HOW THEY STICK AND SPREAD THROUGH THE VACCINES CAUSE AUTISM
MYTH

by

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ABSTRACT

Health myths are health belief systems which prescribe behaviors thought to be health positive by myth-subscribers which are, according to Western medicine, health negative or neutral. These myths become part of individual, family, and community ethnomedical constructions and can have lasting negative health impacts. This project aims to better understand how health myths become lasting and pervasive through a Foucauldian genealogy of the *vaccine cause autism* (VCA) myth. Using a variety of critical rhetorical lenses—including mythic analysis, the narrative paradigm, circulation theory, performativity, and collective memory—this project analyzes six cases across three realms. In the realm of popular culture Jenny McCarthy’s brand-system and the narratives of autism in *TIME* and *Parenting Magazines* are analyzed; in the realm of medicine the diagnostic history of autism in the DSM and foundational articles and the circulation of peer-reviewed scientific articles that arguably link autism to environmental triggers are analyzed; and in the institutional realm Congressional hearings on VCA and the collective memory of autism crafted by non-profits on both side of the VCA debate are analyzed. These analyses demonstrate the commonalities across cases and realms, as well as the points of contradiction, offering a better picture for the ways that macro-social hegemonic discourses coupled with pathos-steeped narratives bind together through sticky affect. This binding creates a bloc of discourses that circulate and re-circulate through popular culture, medicine, and institutions such as government creating many entry points for community construction around VCA. The implications of this project include new insights on affective

stickiness, further development of the links between Foucault and critical rhetoric, and a better understanding of popular culture's place in medical discourses.

LIST OF ABBREVIATIONS

APA	American Psychological Association
AS	Autism Speaks
ASD	Autism Spectrum Disorders
CBPR	Community Based Participatory Research
CCR	Cultural, Critical Rhetoric
DSM	Diagnostic and Statistical Manual of Mental Health
EEG	Electroencephalography
GR	Generation Rescue
HBM	Health Belief Model
HOV	Human Papillomavirus
MMR	Measles, Mumps, and Rubella
PTSD	Post-Traumatic Stress Disorder
SES	Socioeconomic Status
VCA	Vaccines Cause Autism

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CHAPTER 1: INTRODUCTION

Health myths are erroneous beliefs that lead to negative health behaviors.^{1,2} Examples of these types of beliefs include: the governmental administration of AIDS to the Black community as a form of population control (Wingfield, 2010); vaccinations cause autism (Wakefield, et al., 1998); positive thinking cures cancer (Harris & Sancho, 2010); and wet socks or wet hair cause pneumonia (Hayden, 2009). This short list demonstrates that health myths run a veritable gamut—encouraging behaviors that are potentially fatal (avoiding the doctor to avoid being infected with AIDS, not treating cancer and instead thinking positively) to life changing (not vaccinating your children) to somewhat innocuous (changing wet socks and drying your hair as soon as possible). Raluca Cozma (2009) defines health myths “as popular beliefs that are not supported by evidence from any professional medical community” (p. 70). The *vaccines cause autism* (VCA) myth is a particularly sticky myth, surviving with core organizations (such as Generation Rescue) and devotees even after the original research (Wakefield, et al., 1998) that served as the tipping point for the myth’s mainstream popularity has been discredited (Lancet, 2002).

This project is a Foucauldian genealogy that traces the lineage of this myth in popular culture, the medical community, and in its institutionalization. The roots of this myth in popular culture are explored via mainstream magazine coverage and celebrity endorsements. In the medical community, the myth is analyzed through the history of diagnosis and the circulation

¹ It is important to note that this manuscript is not taking the position that the mythologies mentioned are *wrong* or that alternative medicines are in anyway inferior to standard western medicine.

² In the literature review I will ground the study of myth in the rhetorical tradition and explore the ways that the colloquial usage of the word is at odds with the rhetorical studies usage. Furthermore, I will detail how the differences between these usages will be addressed within this project.

and recirculation of Andrew Wakefield et. al's. (1998) article, as well as other medical articles on both sides of the debate. Finally, the institutionalization of this myth is traced through the analyses of the public, Congressional hearings on the myth and the analysis of the public documents of Autism Speaks and Generation Rescue, including websites, mission statements, policy statements, and more.

Purpose

This project explores as a frame the intersections of health communication and critical/cultural and rhetorical studies. Critical scholarship in health communication is sparse and therefore, the project aims to lay a foundation for a line of research that can demonstrate how critical scholarship can be utilized in health communication. Despite the relative lack of critical, cultural rhetorical (CCR) scholarship in health communication, there are some trailblazing scholars who have cut a path for this type of work, including Celeste Condit and Mohan Dutta (previously Mohan Dutta-Bergman) within the field of health communication, and Meredith Minkler, Ronald LeBonte, and Leonard Syme (to name a few) in health promotion and health education. The crux of these prior studies has been to uncover the mechanisms of power within the domains of health, healthcare, and health communication in order to combat systematic injustices and inequalities that go into the reinforcement of health disparities.

While the scholars from health education and promotion use traditional methods of inquiry (both qualitative and quantitative, mixed with Community Based Participatory Research (CBPR) methods), Condit and Dutta focus on where critical forms of inquiry (including rhetoric, poststructural theory, feminism, queer theory, etc.) can be of assistance. As Dutta (2010) puts it, critical forms of scholarship allow scholars to:

“engage with the taken-for-granted assumptions that circulate the dominant ideology of health communication, drawing attention to the interplay of power and control in the formation of health problems and the development of solutions. Critical scholarship in health communication interrogates the structures within which meanings of health are constituted” (p. 534).

Responding to the calls for action from Condit (2012) and Dutta (2010), this research attempts to uncover the ways in which meanings that propagate structural injustices *stick* across demographics and generations within one particular myth (Ahmed, 2004). More specifically, by focusing on a particular health myth, where I define myth as a health belief that produces health negative or health neutral behaviors that are believed to produce health positive behaviors, I can demonstrate how often overlooked phenomena—such as performative and community-building aspects of beliefs—have pervasive affect and effect on emotions and belief systems.

Furthermore, myths allow for robust study, as they function at multiple levels (interpersonal, familial, organizational, and societal) and the interrogation of individual myths provides insight into how to better combat damage for myths and, in turn, how to better communicate health information across demographics to combat other myths.

Cultural and Communication Problem

The health myth of VCA is a particularly pervasive and lasting myth. What makes health beliefs at odds with Western medicine myths, besides the presumed erroneousness of their underlying beliefs³, is that the tenets that undergird these myths act as underlying beliefs for a particular community. Like more macro-social myths (e.g. the American Dream), health myths come with underlying narratives that underline the beliefs of the myth and bind a community

³ Presumed because Western science, which levels the charges, for the most part, against these beliefs is far from infallible or the only way medicine can/should be conducted.

together. The health myth: *The Government Administers AIDS to Black People*, is a good example of the community aspects and narrative undergirding of health myths. In this myth, the documented examples of the governmental-medical establishment mistreating the Black community (e.g. Tuskegee Experiments (Reverby, 2001)) and other minority groups (e.g. Small Pox blankets in Native communities) are the foundational stories, which are coupled with incidence rates of AIDS (e.g. this is a major health disparity with the Black community accounting for 14% of the US population and 44% of the HIV/AIDS cases (Manuel-Logan, 2012)) to create a logical argument in support of the myth (Wingfield, 2010). These underlying beliefs drive the health negative behaviors, which include the avoidance of the doctor's office (Saha, Jacobs, Moore, & Beach, 2010) and an overall mistrust in the medical establishment (Lumpkins, 2012). The VCA myth is a more pervasive myth and has a less coherent community (e.g. an eclectic community in terms of socioeconomic status (SES), race, ethnicity, geography), and therefore makes it a compelling myth to study to understand health myths at large.

It is important to note that health myths have not been studied in a coherent fashion. In fact there are only a dozen or so articles that use the phrase *health myths*. Michael Burgoon and John Hall (1992) offered their 139 question Likert-style survey, which attempted to judge the pervasiveness of 100 different health myths in the general population, as an invitation for a more coherent scholarship on the subject. They posited that since the adherence or belief in a health myth influences health behaviors, that understanding (via taxonomy) health myths would help the medical establishment better work with patients who ascribed to health myths, mitigating their influence. In the end, their study did not create a fleshed out taxonomy (nor should it have been expected to as the pilot), but it did show that health myths were widely believed. More unfortunate than the lack of a taxonomy, is the lack of follow up scholarship (even from the

authors), as the article produced only nine citations, and is only the focal point of one of those studies, Cozma's 2009 look at news media's influence on health myths.

While studies of *health myths* essentially do not exist in the scholarship, Burgoon and Hall point out that medical anthropology (and other anthropological studies for that matter) as a field does study this phenomenon. Burgoon and Hall chide these studies for being single myth focused, as they believe these studies are not generalizable. I contend that case studies of individual community belief systems, that include health beliefs, are a fertile starting point for understanding health myths within US culture. However, I agree with Burgoon and Hall that most of the medical anthropological work (mostly found in the journal *Medical Anthropology*) is little more than a starting point for understanding health myths in US culture, because 1) health beliefs are just one piece of these studies and 2) most of these studies look at groups/communities in less industrialized parts of the world, where the understandings and availability of medical care are vastly different from our own.

Vaccines Cause Autism

In 2010, *The Lancet* retracted an article from Wakefield et. al. (1998) that was the first medical article to make the link between vaccines and autism.^{4, 5} This article focused on children with autism who had severe irregular bowel syndrome (common among autistic children). The retraction, a nearly unprecedented move, came after a prior gentle scolding from the journal in 2002 (prompted by many subsequent studies that were completely at odds with Wakefield's findings). This reprobation came about because the journal reviewed Wakefield's practice and research and found that he was paid handsomely to be a medical witness against pharmaceutical

⁴ *The Lancet* is one of Britain's most respected medical journals, and is often compared with the *New England Journal of Medicine*.

⁵ There are now at least 72, most of which have been discredited, all of which have counter-evidence to refute their findings or different interpretations.

companies for 11 of the 12 children who were the participants in the 1998 study. The retraction came after further review revealed that Wakefield had essentially made up data. Nevertheless, when Wakefield put out his original work, it was not a shocking finding, as the myth had been floated in both the medical world and the popular press for years.

This myth was offered as one of the many explanations for exponential rise in autism diagnosis. Autism was first diagnosed in 1943 and the incidence stayed around 1 in 10,000 children until the early 1980s, when the rise began (incidence now stands at 1 in 68 (Autism and Developmental Disabilities Monitoring Network Surveillance Year 2010 Principal Investigators, 2014)). Of course, some of this upsurge can be attributed to better screening and more still can be attributed to the expansion of what it means to be autistic.⁶ Coupling this with the escalation of the required vaccination schedule⁷ and the changes in vaccination preparation (single dosage shots have been modified to multi dosage shots [e.g. Mumps, Measles, and Rubella (MMR) are all in one shot]) which changed the preservation techniques (a derivative of mercury was used for almost two decades, ending in 2011), offered a compelling narrative with a logical foundation: autism is caused by allergic reactions (or high sensitivity) to vaccines as evident by the rise in autism diagnosis coinciding with the rise in the number of required vaccines. The tipping point of the mainstream popularity of the myth was the Wakefield et. al. article, which confirmed this position, and therefore created a group of believers who will not change their beliefs even in the face of contrary evidence, due, in part, to what I will discuss in the coming chapters.

⁶ Autism started as a singular disorder and is now a spectrum; Asperger's is a good example of the expansion, as this version of autism was first diagnosed in 1944, but did not join the spectrum until 1993.

⁷ In the last twenty years the number of vaccinations children receive before they are three has risen six-fold.

Choice of Texts and Rationale

In an effort to trace the lineage of the VCA myth, this project examines texts within three distinct (arguably) realms. First, given the mainstream popularity of this myth two unique sets of texts are analyzed to understand the myth's place in popular culture. Jenny McCarthy—the comedian, author, actress, Playboy playmate, and main celebrity force behind Generation Rescue, a group dedicated to alternative vaccines and autism treatments—is analyzed as a brand, or semiotic system, that has shifted target audience and cause, while using previous popular culture associations as ethos, and I believe is closely linked to the myth's own popularity. For this analysis, McCarthy's three books (*Louder than Words: A Mother's Journey in Healing Autism* (2007) and *Mother Warriors: A Nation of Parents Healing Autism Against All Odds* (2008), and her dual-authored book with Jerry Kartzinel; MD, *Healing and Preventing Autism: A Complete Guide* (2009)) surrounding this myth are analyzed through a mythic analysis lens that reveals a strong dose of the Joan of Arc myth. A second set of texts in the popular culture realm are analyzed via narrative analysis. These texts are the entirety of coverage of both vaccines and autism in *TIME* and *Parenting Magazines*. These magazines were chosen due to their popularity and cultural prominence.

The second realm of analysis is the medical establishment. Again, two discreet sets of texts have been chosen in an effort to triangulate results. The first set are the way that the top 10 cited articles that link, or at least appear to link, the cause of autism to an environmental trigger such as vaccines, are used by anti-vaccine and pro-vaccine groups. The way these groups use these peer-reviewed medical articles to prove their point is analyzed through a recirculation lens. The second set of texts for the medical establishment are the articles and diagnostic manuals that make up the history of diagnosis of autism. This includes the many variations of diagnosis

presented in the Diagnostic and Statistical Manual of Mental Disorders (DSM), as well as medical articles that establish criterion and have become (or were) seminal pieces for diagnosis. These texts are analyzed through a traditional, close textual, rhetorical analysis.

The final realm of analysis is that of institutionalization. For this grouping the texts analyzed are the 2000 and 2002 Congressional hearings that focused solely on VCA. Given the public nature of these hearings, they are analyzed with a performative lens that demonstrates the citationality intra-hearing and extra-hearing. The second set of texts of this chapter are the publically available documents of Autism Speaks and Generation Rescue. These organizations represent the most reputable, non-governmental organizations on either side of the VCA debate and the analysis includes their websites, promotional materials, and public statements through the lens of collective memory.

These three realms loosely line up with the three levels of analysis, offered by Phil Brown (1995), needed for a social constructionist analysis of medicine and health: the popular culture realm lining up with “the microlevel (such as self-awareness, individual action, and interpersonal communication),” the medical realm lining up with the “mesolevel (such as hospitals, medical education),” and the institutionalization realm lining up with the “macrolevel (such as the nation’s health status, the structure and political economy of the health care system, and national health policy” (Brown P. , 1995, p. 37). While the latter two realms are almost synonymous with Brown’s definitions, the popular culture realm is a bit less clearly related. However, I contend that the way popular culture functions today (through social media and celebrity) and the way this myth is constructed within that realm (through personal narratives), overlaying this realm onto this level is almost a direct fit. Through the analysis of this myth from three different realms through multiple texts, the totality of the reach of the myth can be better

understood. Furthermore, the semiotic meaning system of the myth can be sketched out, as well as the ways the meaning system borrows, changes, challenges, co-opts, etc. other extant meaning systems.

Brief Preview of Method/Critical Approach

The overarching methodology of this proposal is a Foucauldian genealogy informed by a critical rhetorical analysis. Michel Foucault developed his genealogical approach in what David Couzens Hoy calls Foucault's second level. Hoy charts Foucault's three levels of analysis chronologically across Foucault's career, starting with archaeology and ending with ethics (1986). Some claim that Foucault's shift from his original archaeology, developed in *The Order of Things* (1966) and *The Archaeology of Knowledge* (1972), to his genealogical approach, primarily developed in *Discipline and Punish* (1977), was an admission a fatal flaw in archaeology—the treatment of “language as autonomous and as constitutive of reality” (Hoy, 1986, p. 4). However, Arnold Davidson's (1986) exploration of Foucault's methodologies avoids comparing Foucault's three levels, or periods, of scholarship in a linear, mutually exclusive way. Instead, Davidson suggests that we view these approaches by what they do and, therefore, understands that the approaches bleed into each other. Through this understanding an archaeology is “an analysis of systems of knowledge,” a genealogy is an analysis of “modalities of power,” and an ethical analysis is an analysis “of the self's relationship to itself” (Davidson, 1986, p. 221). Using this lens, we do not have to disregard useful tools from the archaeological method—such as the understanding of discourses as a set of governing rules willingly submitted to by discourse submitters—but are not left with the limitations of the method—where there is no exit or space for change (Walzer, 1986). A genealogy with this foundation is one that seeks to build a history of the present through an exhaustive analysis of discourses relating to the central

inquiry. Therefore, this project aims to dig down—in the fashion of an archeological analysis—and across.

Since a genealogy is interested in creating a history that can better inform our understanding of the present, it is necessarily informed by the author's own dispositions and subjectivities. As such, this project is offered as an argument about how we should come to understand not only how and why this particular myth is so pervasive and sticky, but also how and why myths come to be a conduit for power and form community. By offering the analysis as an argument, the foundation of critical rhetoric is at the center of this project (McKerrow, 1989).

More specifically, each of the six case studies outlined above use different rhetorical methods, which were decided on as they presented themselves in the analysis of each set of texts. To start, each text underwent a close textual analysis, which uncovered appropriate lens of analysis for each case. The analysis of McCarthy lent itself to a mythic analysis, while the magazines in the popular realm employed a narrative analyses; in the medical realm critical, cultural looks at circulation and fragmentation was used for the way anti- and pro-vaccines groups used empirical articles as proof while a traditional rhetorical⁸ reading provided the depth needed to trace the history of diagnosis; and, finally, in the institutional realm the lens of performativity was used to read the Congressional hearings and collective memory was used to re-craft the varying discourse of autism created by Generation Rescue and Autism Speaks.

Research Queries

The VCA myth has created a community that ascribes to specific beliefs and behaviors. Furthermore, the myth has created discussion in the broader culture and even in the medical community. As such, the primary aim of this project is to uncover what makes this particular

⁸ For the purposes of this project, traditional rhetorical approaches refers to close textual analysis, which includes tools such as metaphoric analysis, homology, ideographic analysis, etc.

myth so compelling, pervasive, and lasting. Through this exploration, a macro inquiry is how can health communication scholarship be enhanced through CCR methods.

Another specific line of inquiry to this particular myth relies on and changes what counts for ethos, shifting credibility away from the medical establishment into other realms such as popular milieu and folk sectors. This line of inquiry necessarily grounds the project in a social constructionist paradigm, and therefore invites the inquiries Brown charged that any social constructionist study of medicine needs. Particular to VCA is: “How does a person’s experience of the illness affect the course of the disease, as well as the social outcome of the illness?” (Brown P. , 1995, p. 37). This inquiry is paramount since the myth has created two communities: the medical establishment and the myth subscribers.

Preview of Project

In chapter two the literature on myth is explored as this project’s theoretical groundings. Furthermore, literature on health beliefs including the single-disease model of medicine, social constructions of health, healthy, and medicine, the link between Foucault and medicine, the history of health misinformation and health myth research, and the knowledge gap between lay and scientific persons will be explored to situate the case at the center of this project before turning to the specific history of the VCA myth. The final part of chapter two deals with affective stickiness, which is the crux of this project. Chapter three focuses on the methodological and theoretical lenses of each of the six cases. I first explain my understanding of a Foucauldian genealogy and critical rhetoric. Next, I offer syntheses of theoretical lenses that inform the analysis, including narrative analysis, mythic analysis, performativity, memory, and fragmentation.

Chapters four through six are the analysis chapters of this project, each analyzing two cases within a particular realm of analysis. Chapter four analyzes the micro-level as embodied by two cases grounded in popular culture. The first case focuses on the extant brand of Jenny McCarthy and views this brand through a mythic analysis lens. The second case of the chapter explores the entirety of the coverage of autism in *TIME* and *Parenting Magazines* through a narrative paradigm lens. Chapter five moves onto the meso-level, in this case the medical realm. The first case uses traditional rhetorical analysis to trace the themes and intricacies of the discourse of autism across the history of diagnosis, while the second case turns to a circulation lens to study the ways that empirical evidence that supports, or appears to support, VCA are used as proof. The final chapter of analysis is grounded in the macro-level and explores the institutionalization of competing discourses of autism with particular attention paid to discourses informed by VCA. The penultimate case dons a performativity lens to better understand the intra- and extra-hearing citations employed in Congressional hearing centered on VCA. The closing case employs a collective memory lens to investigate how leading, non-governmental organizations in autism craft the discourse and history of autism. The final chapter offers implications for ethos, stickiness, the role of CCR in health communication, and a theory that aims to explain what makes a health myth lasting and pervasive.

CHAPTER 2: LITERATURE REVIEW

This literature review organizes a historical and theoretical foundation for the six cases in this Foucauldian genealogy. To start, myth is explored in the broader context of critical, cultural, and rhetorical study (CCR). This section demonstrates the breadth of mythic studies in terms of subject matter, sites of analysis, implications, and methods. Second, the context for the case is explored through an in-depth review of relevant US medical and health history. This analysis focuses on the ways that knowledge came to be organized within a Western medical tradition. Specifically, the lineage of the single-disease model, the social construction of medicine, and the gap between lay and scientific knowledge is explored. Next, the history of *vaccines cause autism* (VCA) is traced, as well as the central points of debate. In the final sections of this review, the theoretical basis for study is fleshed out via an exhaustive exploration of affective stickiness. More intricate exploration of methodological and theoretical angles are explored in chapter three.

Myth

The rhetorical study of myth is an attempt to uncover underlying narratives, beliefs, behaviors, and rituals that bind particular communities together. Myths act as sets of central stories for groups of people. In David Sutton's words: "Myths are sacred stories that are regarded as true by their narrators and audience" (1997, p. 212). While the colloquial usage of the word links myth to cultures of the past, myths are very much present in present society. However, our myths may masquerade under different names, such as cultural narratives. The fact that colloquial usage of the word myth has been linked to fables and other stories which are believed to be based outside of reality makes the use of the word myth, and therefore the study of myth, difficult in contemporary context.

This difficulty is evident in Richard Hughes' exploration of foundational American myths. Hughes (2003) traced five foundational myths of American, all which reify the American Creed (or at least appear as if they do). Creed: "All men are created equal" (p. 2). Myths: 1. "The myth of the chosen people" (p. 6), 2. "the myth of Nature's Nation" (p. 6); 3. "the myth of the Christian Nation" (p. 6), 4. "the myth of the Millennial Nation" (p. 7), and 5. "Manifest destiny" (p. 7). These myths should be familiar to any American, as they represent what was taught in our American history classes and popular culture. However, calling them myths might be considered sacrilege if using the colloquial definition of myth. This predicament is what makes the study of myth, at least in popular culture, difficult. In his re-contextualization, Hughes is able to demonstrate that:

"Contrary to colloquial usage, a myth is not a story that is patently untrue. Rather, a myth is a story that speaks of meaning and purpose, and for that reason it speaks truth to those who take it seriously" (2003, p. 2).

With an understanding of myths as something core or essential to group cohesion, as a type of truth, the study of myth becomes less arduous. First, the importance of the study becomes evident and the implications become further reaching. Second, mythic studies through this lens can be linked to critical rhetoric, as these studies seek to understand *truth*.

Ronald Morris (1997) looked into the myths propagated in sexual education classes. In this exploration, the importance of the study of myth within a health context is clear. Morris demonstrates that common sense understandings of health encompass much more than the realms of health facts. Instead, our understandings of health are rooted in popular myths propagated through the ill-informed, teachers with agendas, popular culture, and more. Furthermore, Morris cites the introduction to Sam Keen and Ann Valley-Fox's *Your Mythic*

Journey when explaining how this intricate nature of myths makes the effects of myths difficult to trace in a linear fashion: “myth refers to an intricate set of interlocking stories, rituals, rites, and customs that inform and give the pivotal sense of meaning and direction to a person, family, community or culture” (Morris, 1997, p. 353). By giving us meaning or a sense of meaning and community, Morris argues, the underlying, rhetorical message of myths encompass “Real values, those that we live our lives by, are not objects just sitting there like produce on a supermarket shelf. They are deeply embedded in our personal, family and cultural mythology.” (1997, p. 353). In the coming chapters, I demonstrate that while mythic studies in health are not there by name, they are there through the study of cultural values. Rhetorical myth studies compliment these ethnomedical studies by bringing to light the power of unifying beliefs that bind people together with stories and values that go unquestioned.

In conclusion, mythic studies are studies of beliefs and values in communities of people. Therefore, they are studies of how these values are passed between people. In this construction, myths are pervasive and also cloaked, becoming what Michel Foucault called a technology of power (Foucault, 1978). “Traditionally, the historical text that united singular public expressions into a narrative is called a ‘myth.’” (Rushing & Frenztz, 1989, p. 64). If we understand myth as veiled and foundational to community construction, then it may be understood that they are difficult to change. While this is true, myths do change over time:

“Myths are integral to the fabric of people’s lives as lived, not just to their aesthetic and rhetorical products. Thus, the formation and change of a cultural myth occur in all aspects of public life—economic, political, social, and communicative.” (Rushing, 1986, p. 269).

In Janice Rushing and Thomas Frenztz’s (1989) exploration of modern adaptations of the Frankenstein myth, they demonstrate how myths are “evolving rather than static” (p. 63), which

they argue allows for studies of myths to “unearth” (p. 63) contemporary tensions. This understanding of myth plays into the importance of myth in the understanding of the silenced and how myths are able to be leveraged in hegemonic formations without the marginalized’s knowledge. In other words, at the heart of mythic studies is the uncovering of the tensions and people or groups of people that a myth silences, as much as those tensions and people it directly speaks for. In Philip Wander’s expansion of rhetorical studies—the tipping point of the ideological turn—he posits that it is the critic’s job to highlight the silenced, those “not present [e.g. not the narrator or intended audience], audiences rejected or negated through speech and/or the speaking situation...the Third Persona” (Wander, 1984, p. 209). This grounds mythic studies squarely in the realm of the “critical rhetoric” (1989, p. 92) championed by Raymie McKerrow and at the heart of this proposed dissertation.

Context/Case

Medicine and health are viewed as stable, material realms grounded within the rational world paradigm. Therefore, to study a phenomenon within these realms, it is necessary to destabilize these understandings and therefore these discourses. In the coming chapters, medicine and health are shown to be socially and rhetorically constructed, specifically within Western/US domains. Before turning to how health has been historically constructed in US/Western medicine, I will provide a brief explanation of health beliefs.

Health Beliefs

Health beliefs encompass individuals’ value-systems about healthful behaviors (Glanz, Rimer, & Viswanath, 2008), or those behaviors that individuals believe effect their health and those behaviors that they do not believe effect their health that actually do. Furthermore, an individual’s discursive construction of health and healthy are also part of health beliefs, which

folds into their understandings of susceptibility to illness (Hughner & Kleine, 2004; Syme, 2004). Health beliefs in individuals arise from a complex network of influences. Renée Hughner and Susan Kleine (2004) offer a concise synthesis of this complexity in their discussion of health worldviews, which are the foundation of health beliefs. They describe health worldviews as “complex interweavings of information drawn from different sources including lay knowledge, folk beliefs, experiences, religious and spiritual practices and philosophy” (p. 397). These interweavings include health myths, as health myths are grounded in knowledge and belief systems outside of the medical establishments.

It is important to note that there are fields (e.g. health promotion and health education) devoted to understanding health behavior and how to shape and instill positive health behaviors, and how to change negative health behaviors. Much of this research focuses on behavior change through belief change, as beliefs are viewed as antecedents to behaviors. This project is not focused on changing a particular behavior, or really any sort of intervention, so an exploration of these literatures is outside of its scope. That being said, it is important to at least provide some context about belief and behavior change, as the difficulty in these changes fold into the strength of health myths. Beliefs can change but this type of change is a complex process involving many steps, as theorized through the Health Belief Model (HBM).⁹ The HBM posits that “persons take preventative action [adding a health positive behavior] if they believe (1) they are susceptible to the disease, (2) the disease would be severe, (3) taking an action would be beneficial by reducing the susceptibility of the disease, and (4) barriers are not difficult to overcome” (Crowther, Green, & Armstrong, 2004, p. 557). Additionally, the individual must believe they are capable of the

⁹ HBM is a popular theory of behavior change in health sciences and is chosen as an example due to its popularity. Other theories have similar understandings of the difficulty of behavior change and the influence of beliefs on said changes, such as the Social Cognitive Theory, the Transtheoretical Model, the Social Ecological Model, and more.

change (self-efficacy) and, typically, a cue to action is needed to start the individual toward change (Glanz, Rimer, & Viswanath, 2008). A layer on top of beliefs to effect behavior is that of attitudes. Social judgment theory posits that attitudes act as a sort of starting point for individuals' views on any piece of new information or rhetoric (Sherif & Sherif, 1968). The farther someone's attitude is from new information they encounter, the less likely they are to even listen to said information—what Muzafer Sherif and Carolyn Sherif dubbed latitudes of acceptance and rejection. In sum, health myths encompass attitudes, beliefs, and behaviors—which means they influence ethnomedical constructions at multiple levels.

Health beliefs are undergirded by health knowledge, which is most often linked to health literacy, but barriers to health knowledge include the aforementioned beliefs, as well as access (including physical, cognitive, and cultural). Cultural influences on beliefs and access also pervade health disparities at the level of health knowledge, as the ways in which information is disseminated can reinforce and widen disparities gaps if the knowledge is presented without thought to particular differences between communities. Jonnie Marks, Wornie Reed, Kay Colby, and Said Ibahim (2004) explicate the intricate nature of how health knowledge is developed into personal “everyday ethnomedical” (p. 154) theories about health, where individuals use “ideas from the professional, popular, and folk health sectors” (p. 153) to form these personal constructions. In other words, ethnomedical understandings of the world are what each individual constructs through their own available sources of information. Part of our ethnomedical understandings come from the way health is constructed in the US. Because people of the same culture are inculcated with similar norms and meaning systems, these systems necessarily inform these ethnomedical understandings. In other words, while individual people and communities can create ethnomedical worldviews that are at odds with the dominant medical

paradigms and understandings of the larger culture, these worldviews are still informed, or at least somewhat founded on, the dominant medical paradigms and understandings of the larger culture.

The Single Disease Model

The single-disease model of health is a disease-centered approach to health and healthcare. The foundational constructs behind this model are that being healthy equates to being disease free and that every “illness has a single underlying cause” (Wade & Halligan, 2004, p. 1398). This model is also referred to as the biomedical model, and has “dominated health care for the past century” (Wade & Halligan, 2004, p. 1398). The foundational constructs lead to an understanding of health that forecloses discussion on social determinants¹⁰ or any intersections between factors on which health depends. In other words, the biomedical model is a “reductionist model...hence, each disease or illness can be explained in terms of faulty physiological or biochemical processes” (Brennan, Eagle, & Rice, 2010, p. 11). This type of reductionism places the onus for being healthy on the patient with “psychological and social factors...excluded” (Brennan, Eagle, & Rice, 2010, p. 11). Furthermore, social determinants necessarily involve a web of antecedents that cannot be solved within the single-disease model.¹¹ In other words, this model is interested in looking for the cure to what ails someone, and, ideally, the cure would come in pill form—in Kevin Wildes’ words: treatments for illness are “expected to be curative”

¹⁰ Social determinants of health include aspects of a person’s life that they have little to no control over. These are generally tied to socioeconomic status (SES), but not always, and include things like access to food choices, air quality, access to healthcare, money for healthcare, ethnomedical theories about health, etc.

¹¹ Another issue that this approach contributes to is health disparities. Health disparities are differences between demographic groups in particular health outcomes (e.g. the incident rates of AIDS is higher in the Black population than the White population; diabetes incidence rate is inversely correlated to SES). Health disparities are compounded in the single-disease model of health because health disparities are the result of a web of antecedents, many of which are out of the control of the populations which are effected (e.g. air quality, access to healthy food, etc.). As evident by the continued growth of these disparities even with extra attention (and calls to action via NIH, CDC, healthy people, etc.), our current, single-disease model, has little available recourse to deal with the complex web that these disparities rely on.

(2001, p. 71). In sum, this model reduces health to a binary logic (healthy/unhealthy) and therefore reduces treatment likewise (cured/uncured). Therefore: “The patient is a victim of circumstance with little to no responsibility for the presence or cause of the illness” (Wade & Halligan, 2004, p. 1398). Of course, while this is the dominant model of healthcare and contributes to the expansion of health disparities because the patient and therefore, more importantly, the patient’s environment are exonerated from blame, good does come from this model. Specifically, this model is very adept at attacking diseases that do have single causes (e.g. Lyme Disease, bacterial infections, AIDS, etc.). However, most of the public health problems of today involve chronic conditions (e.g. obesity, heart disease, cancer) that do not have antecedents that can be traced back to the patient and therefore are not ideal to be studied in the single-disease model. Furthermore, since health is more than the absence of illness, this model shades peoples’ understandings of their own health so that they look for easy, single answers. Tying this insight back into the previous section, the single-disease model influences ethnomedical theories where even if they stray from mainstream advice, they still may be looking for single-effect solutions.

Health, Healthy, and Medicine as Social Constructions

The fact that the single-disease model of health has been dominant for so long and that said model is still dominant and yet scrutinized, demonstrates how health, disease, and medicine are social constructions. The social construction of these domains is the key to effective critical critique, as it allows for an understanding of medicine as rhetorical: “Above all, rhetoric is required to create new disciplines, as in the case of the differentiation of chemistry from alchemy” (Harley, 1999, p. 411). Grounding the study of health and medicine in social constructionism necessarily grounds it in the rhetorical tradition. Furthermore, it allows for a

critical rhetorical look at medicine where the text that creates the discourse are fragmented and therefore need to be reassembled. The purpose of this type of study is to question discourses that go unquestioned, in the tradition of critical rhetoric. Critical rhetoric, which will be developed more fully in chapter three, allows the critic to be responsible for invention in the crafting of the artifact because it understands discourses and the technologies of power that perpetuate discourses to be fragmented and, often, occluded. Additionally, critical rhetoric is interested in power relations and how technologies of power manifest, as well as what these relations and technologies abject—which necessitates attention to the small events, or the everyday, in the unraveling of power. The implications of a world where health, healthy, and medicine are social constructions then reach into how we understand ethnomedical constructions, and therefore reach into the everyday which can have both theoretical and practical implications. Phil Brown notes that: “By studying how illness is socially constructed, we examine how forces shape our understanding of and actions toward health, illness, and healing” (1995, p. 34). The actions Brown speaks of can be personal actions, but also collective and policy actions.

To understand the ramifications of viewing medicine and health as socially constructed, we need only turn to the medicalization of the field of beautification. As Susan Bordo (1990) demonstrates in the forward to her anniversary re-release of *Unbearable Weight*, the concept of beauty has clear social roots. She cites the rise in eating disorders in Fiji pre and post the introduction of television in 1995 on the tiny island, noting that incidence rates went from virtually zero to 11% in female adolescents in only nine years of television exposure. Beauty is intricately linked to health and wellness, as much of the current focus in health promotion and education focuses on nutrition and exercise, due, in part, to the rise in obesity. The reciprocal effect of these efforts is the continued focus on image-driven discourses that place beauty,

specifically female beauty, into a world of unrealistic body sizes that increase not only eating disorders and negative health behaviors, but also plastic surgery. In Brown's (1995) exploration of the social constructionist foundations of medicine, he notes that "the postmodern constructionism views the legacy of medical and social control as specifically targeted at the body: control may be in terms of physical and emotional health, as well as by the moral cultures of self-beautification and self-maintenance" (Brown P. , 1995, p. 36). Brown claims that Bryan Turner's sociological work links the medicalization of image and body to "commodity production and advertising" (p. 37). Moving into the space of commodification—where relationships between people and things that are not normally part of economic exchange (i.e., commodities) are understood and become as part of an economic exchange (Ekman, 2012)—the study of discourses within and surrounding health fit squarely in both a capitalist and gendered framework. The discourse of capitalism is echoed in Nigel Thrift's (2010) work on glamor and materiality. Thrift shifts affective scholarship into a capitalist paradigm, where aesthetics have become a commodity which is informed and regulated by capitalistic machineries. An interesting link from Thrift to Patricia Clough (2010) is the capitalism of affect. Where Thrift explores aesthetics, Clough looks to biomedicine and bodies. One particularly interesting insight is her description of the way biotechnologies and in turn pharmaceutical drug culture, spawns an economy where the body becomes a site of capitalism simply to maintain stability and normalcy.

When we view bodies as commodity and therefore part of a capitalist system, then we can better understand how the occlusion of the social construction of medicine helps to perpetuate and give birth to these discourses. Since our culture is built on capitalism and commodity fetishism, and we celebrate these facts, then we can read Kevin Wildes' (2001) view of medicine as almost chilling: "To say that medicine is socially constructed is to recall that

medical practice is influenced by the values, moral and otherwise, of the culture in which it is situated” (Wildes, 2001, p. 82). In other words, capitalism is impossible to escape. This is why the critical turn in health communication mentioned earlier is so vital: “The critical perspective constructs health communication as a political process, marked by power relations that determine the relationship between the bourgeoisie and subaltern classes” (Dutta-Bergman, 2004, pp. 105-106). With this as our goal we must always know that:

“The presentation of medical ideas in an open market requires them to connect with the core beliefs of a substantial group of potential patients. Dividing medical practices and practitioners into ‘popular’ and ‘elite’, or ‘folk’ and ‘learned’, therefore obscures intellectual and social diversity among practitioners and patients” (Harley, 1999, p. 414).

This clearly links the capitalist discourse and the aforementioned ethnomedical worldviews. It also requires the examination of others. Clearly, gendered discourses become apparent when looking to Bordo’s work, or any look toward commodity and bodies. But gender is also a proxy for any hegemonically marginalized group, in this case. With this in mind, Elizabeth Grosz’s (1994) position that there is a Cartesian dualism—where women are tied to the body and emotion with men tied to the mind and intellect—is an apt theoretical underpinning of any social constructionist critique of medicine. Of course, medicine is imbued with macro-hegemonic orderings and therefore the mind/body split runs throughout the whole of medicine.¹² The implications of this fact, coupled with a social constructionist view of medicine and the

¹² While gender is not at the center of this proposed dissertation, its discourse is intricately linked with medicine and therefore the use of queer and feminist scholars (such as Sarah Ahmed, Bordo, Grosz, and Judith Butler) is justified. With that noted, the ties between gender and VCA specifically run deeper than this link. For example, early diagnoses of autism linked the cause to the so called *refrigerator* moms—where the mothers of autistic children were blamed for being cold (Wallis C. , 2007). Furthermore, I believe that these scholars and their theories, while based in gender, extend beyond gender. Butler has recently began using her theories to better understand social protest (Butler & Athanasiou, 2013), while Grosz has turned to Darwinism and art (Grosz, 2011).

presumed innocuousness of medicine makes it clear how vital a critical turn in health communication is.

Turning to Foucault for the Study of Medicine

If medicine, health, and healthcare are social constructions, or at least have components that are social constructions, then it follows that health disparities and health problems that have social determinants may be influenced by these constructions. Perhaps the social constructionist aspects of health allow for phenomena like health myths. Medicalization was mentioned above as a technology of power to re-inscribe institutional power over bodies through the guise of medicine and health. This phenomenon is well studied and has direct links to capitalist discourses, for example Ross Brennan and his collaborators (2010) linked social constructions of health to the marketing side of medicine and health. “Medicalization can be broadly defined as the redefining or reconceptualizing of nonmedical behaviors, experiences, or problems as medical in nature” (Brennan, Eagle, & Rice, 2010, p. 10). As stated above, solutions to illness are preferred to come in pill-form, rendering “the patient... a passive recipient of treatment” (Wade & Halligan, 2004, p. 1398), which is at the root of medicalization since much of this neo-colonial work is being done by pharmaceutical companies. In a post-structuralist critique, this type of rhetorical move could be viewed as neo-colonialism, as the medical world claims that which used to be beyond its borders in an effort to have more control over bodies and the ways they are described and controlled through discourse, in this case, profits. Through this lens, the links between medicine and Michel Foucault¹³ become clearer. As Foucault illustrated throughout his work, part of the power of discourses involves the ability of discourses to expand

¹³ Foucault has been called the heir to philosophical giants such as Nietzsche and Kant, and has been dubbed the most important philosopher of the twentieth century by some (Hoy, 1986). His contributions to how we understand the world and the orderings of knowledge are immeasurable. While he is a divisive figure, he left behind ways to think about the world that can be useful to any field or from any subjectivity.

and regulate new agents. Expansion is possible through cataloging and therefore institutionalization of symptoms—demonstrated by Foucault through madness (Foucault, 1965), sexual practices (Foucault, 1978), deviance (Foucault, 1977), medicine (Foucault, 1973), and more. As Brown articulates, the breadth of medicine and health covers so much of society, that it becomes impossible to critically examine these discourses cohesively without looking at a multitude of systems, such as “ the roles of professionals, institutions, governments, media, pharmaceutical companies, patients, and people with illness and disabilities as well as their families” (1995, p. 37). This project attempts to do this through multiple texts from multiple realms—filtering these analyses through a variety of critical, cultural, and rhetorical lenses, while always grounded in the understandings of the world that Foucault developed. In other words, this research understands the world to be made up of hegemonic discourses that are omnipresent and occluded, with the only way to escape or discover change is through the reorientation of these discourses. Foucault demonstrated this type of reorientation requires a rewriting of history to serve the present—changing our understandings of our current worlds without predicting or mapping out a solution (as this type of mapping would inevitably lead to the status quo—such is the power of hegemony).

As will be more fully explored in chapter three, to ground my Foucauldian genealogy I use rhetorical lenses and means. This echoes Harley’s plea for more rhetorical work in the social construction of medicine: “Rhetorical and semiotic analyses are therefore the tools that uncover the connections between the larger social constructions, be they political, religious, or economic, the development of medical beliefs and elaborated theories, and the success or failure of healing” (Harley, 1999, p. 435). There is some work in this area, but it is disjointed and I hope to link work across disciplinary boundaries and I believe Foucault offers the tools to do so.

History of Health Myth Research

Health myths are a natural point of entry for critical analysis of health communication, as they demonstrate the community building properties of myths and the ability to perpetuate disparities. In this section I review the literature on health myths, to date. Michael Burgoon and John Hall's (1994) empirical study of health myths lays out the history of research on culture specific health practices that fold into health mythologies. The lion's share of this literature is anthropologic in topical direction and comes from the journal *Medical Anthropology*. Given this background, it is not surprising that Burgoon and Hall discredit, or point out the limits, of this research thusly: "Yet the anthropology literature lacks theory-driven behavioral models that predict health-related actions that are open to falsification. This should come as no surprise because positivistic, behavioral research does not interest most medical anthropologists" (1994, p. 98). Given the authors' backgrounds (social scientists in communication) this critique is expected. However, they go on to criticize social and behavioral sciences just as harshly. While they acknowledge that research coming from social and behavioral sciences on health behaviors are rooted in theory, they point out that these theories, while useful, fail to capture health myths because they do not attempt to describe the "extant belief systems..." or account "for substantial amounts of variance between behavior" (Burgoon & Hall, 1994, p. 98).

While other studies (cited below) dabble in health mythology, Burgoon and Hall's study is the only study to empirically and systematically question the mechanisms at work and quantify the problem. Since the study was preliminary, much of the data leaves a bit to be desired. Specifically, while they found many people believed particular health myths, they did not find a satisfactory pattern to which health myths were believed by which people. Given the exploratory design of the study, which dictated the format—a Likert-style survey that included 139 questions

and over 100 health myths—it is not surprising that they did not find this link. The most important take-away from the study is their call for more research: “future research should attempt to link more precisely acceptance of health myths and differences in the structures of belief systems to objective data and overt behaviors” (Burgoon & Hall, 1994, p. 113). While this study did not catch fire since its publication, with the new paradigm we face in health communication, one where the internet provides easy access to support for these myths, it is important that we rekindle this work today. Raluca Cozma (2009) did start the rekindling with a study demonstrating that source credibility, specifically credible news sources, can play a positive role in the reduction of health myth adherence. However, Cozma’s study focused on channels of information, and therefore did not further our understanding of how health myths stick.

While no research has explicitly taken this baton from Burgoon and Hall, there is work that delves into specific health myths. These studies demonstrate that myths can be generated from personal experiences (Hayden, 2009), culture (Cline & Johnson, 1992), religion (Coleman, 2009; Colon, 1992), etc. In the late 80s and early 90s, the dangers of health myths was illustrated through the way people viewed HIV and AIDS as a *gay plague* and therefore did not alter their own sexual behaviors to protect themselves (Cline & Johnson, 1992). This is an example of how culture can craft health mythology as Rebecca Cline and Sarah Johnson (1992) link the mythology of the *gay plague* to a homophobic worldview that was crafted, in part, through media coverage and, in part, through a heteronormative (Warner, 1991) worldview. Concisely put: “with AIDS, we know that bias against homosexuals played an important role in delaying recognition” (Brown P. , 1995, p. 49). Religion can be another source of health mythology, as Kate Coleman’s (2009) study of Charedi Jewish women with breast cancer demonstrates. She

found that Charedi women believed their cancer was a test from God. They coupled this belief with the fear of stigma from mastectomies, and in turn never being able to marry, into a mythology that led these women to forego life-saving treatments (Coleman, 2009). In another example of religion creating health mythology, Israel Colon (1992) found that belief in predestination negatively correlated with seatbelt usage. African American's were less likely to wear seat belts than Caucasians because those in the study had higher levels of belief in a religiously grounded predestination (Colon, 1992).

This project is an answer to Burgoon and Hall's call for more research on health myths. However, I do not take up the call in the way I assume they would want. Instead, I use health myths as a way to shift the dominant paradigms of health communication research. In health education and promotion there are many scholars who have clamored for years to shift how research is done. Much of this work has led to Community Based Participatory Research (CBPR) approaches to research. While this work is incredibly valuable, I believe it can be further enhanced through a turn to critical scholarship.

Knowledge Gap Between Scientist and Lay Persons

As the internet becomes more readily available to all, shrinking the technology gap, and more cluttered with competing information, it is important to understand myths to efficiently and effectively combat them. One vital component to a health myth is the lack of scientifically verified information. This lack of information may occur by choice, by necessity, by malfeasance, by access, etc. The knowledge gap between scientists and lay persons directly influences the necessity and access (cognitive, at least) causes. In Western society, scientific information becomes more specialized and complex by the day. Bernadette Bensaude-Vincent (2001) argues that the gap between the scientific community and the public has evolved in three

stages. In the first stage, early nineteenth century, the difference was characterized “by their style of argumentation” (p. 108). In the late nineteenth century, with the rise of formal mathematics, “the difference in style became a linguistic one,” which made a “mediator or translator” (p. 108) between the two sectors necessary. Finally, the twentieth century, and current state, is characterized by these populations (scientists and lay persons) living “in two different worlds” (p. 108). In other words, as science has become more specialized, the world that scientists live in has become separate from that of lay persons. Therefore, the knowledge between these two worlds is separate and only crosses over with translators. The translators then must accurately convey the information and must be trusted. This creates a barrier to scientific information for the lay person and that barrier provides space for myths. These barriers and who can traverse them become trickier and less reliable/predictable as the world becomes more fragmented in terms of information sources.

Because of this gap, and the continued push for more specialization in medicine, the media has become the de facto translators between the lay community and scientific community:

“The mass media are the most important source of health-related information for many people. Media portrayals contribute to the creation and reproduction of knowledge about illness and disease...the media [may] represent an alternative form of authority on medical knowledge, shaping the public perception of health and illness” (Brennan, Eagle, & Rice, 2010, p. 13).

The media are prominent in our understandings about health and medicine, but not just through the formal means, such as journalism about science. Informal medical translation can have positive impacts, such as the *Grey's Anatomy* episode encoded with a message about how AIDS is transmitted and prevented between mother and child (Rideout, 2008) or celebrity narratives

about their own struggles with illness (Beck, Aubuchon, McKenna, Ruhl, & Simmons, 2013). But often, this translation is more subtle, encoded simply in the way medicine is used as a prop in shows. Or worse still, the messages can be overtly misleading, like those imparted through *The Biggest Loser*, with viewers learning that weight loss is a crash and burn process, while also receiving reinforcement for stereotypes of overweight individuals (Silk, Francombe, & Bachelor, 2009; Domoff, et al., 2012). The audiences of these media learn how they, as patients and citizens, are supposed to act in different health situations. Paramount for this analysis is how individuals act in vaccination situations. Gary Freed and colleague's (2011) recent survey found that 26% of the general population (in America) and 40% of the Hispanic population placed at least some trust in celebrities for information on vaccination. Therefore, the evidence that the myth at the center of this project is informed and influenced by translators leads to the need to study both the community of the myth and the translators of the myth and surrounding discourses.

As Joe Cullen (1998) notes, the gap between science, medicine in particular, and lay understanding "is not difficult to trace," where the "social construction of medicine and the medicalization of social relations" continue to further this divide (1998, p. 1546). This claim leads him to a Foucauldian conclusion where this divide renders the patient powerless and subjectified by the doctor. I contend that this subjectification is not only to a doctor, but also the discourse one chooses to subject oneself to. In other words, those who believe a myth that instills a distrust of doctors (in this case, about vaccines) are still subjectified as they relinquish their power in the situation to the myth and what the myth dictates. In this view, the patients "relinquish their autonomy and control over their body" (Cullen, 1998, p. 1546). This relates

back to Grosz's (1994) mind/body dualism, rendering the myth/doctors as mind and the patients as body—emotive and affective driven.

Current Autism Debate.

The myth of VCA thrives in the space between lay and scientific knowledge. Dr. Leo Kanner of Johns Hopkins University first defined autism in 1943; before that time most autistic children were diagnosed as mentally retarded and institutionalized (Staff, 1969). Autism was once a disorder so rare that doctors would invite their colleagues in to see cases when they found one, with an estimated prevalence of only 1 in 10,000 children (Nash & Bonestell, 2002a), now autism is estimated to affect 1 in 68 children (Autism and Developmental Disabilities Monitoring Network Surveillance Year 2010 Principal Investigators, 2014). Part of this rise can be linked to the expansion of autism from a single disease to a spectrum of disorders. For example, Asperger's Syndrome was not officially accepted as part of the spectrum until 1994, even though it was discovered just one year after autism, in 1944 by Dr. Hans Asperger (Nash & Bonesteel, 2002b). This expansion is a continuous process as autism is better understood through further study: "Each successive edition of the Diagnostic and Statistical Manual of Mental Disorders—the bible of mental health—has revised the criteria for identifying autism in ways that tend to include more people" (Wallis C. , 2007). Partly a symptom of the rise in autism prevalence, and partly as a symptom of more research, different causes for autism are consistently being hypothesized. The most controversial hypothesis is the myth at the center of this inquiry: VCA. As stated above, this was first proposed in a peer-reviewed, official-type way by Andrew Wakefield et. al. in 1998, in a digestive disease study published in the highly respected British medical journal *Lancet*. Almost immediately following this publication, the medical establishment rebuked this claim through empirical studies and meta-analyses, including a

rebuke from the *Lancet* itself in an editorial (Lancet, 2002). However, it wasn't until 2010 that the journal took the nearly unprecedented step of actually retracting the original Wakefield et. al. article, citing the unethical methods of Wakefield and colleagues (Wallis C. , 2010). As this project demonstrates, even with the official retraction and substantial evidence to the contrary, this myth persists and this article continues to serve as proof for myth subscribers. Furthermore, autism continues to be a hot topic for quick answers to causation: "Recent speculation has focused on pesticides, childhood vaccines and thimerosal, a mercury-based compound that until recently was used to preserve medicine... The latest candidate? Television" (Wallis & Park, 2006). This explosion in prevalence, the lack of a treatment that works across the spectrum (Greenfeld, 2010), the lack of an actual cure, and the willingness of parents of afflicted children to spend money on unproven treatments has made autism, I argue, the perfect breeding ground for myth and myth believing. In the next section I describe stickiness as the binding theoretical angle for the proposed dissertation.

Stickiness

Both practically and theoretically, the most important implication of this project is a better understanding of how health myths stick. This is foundational to our future efforts to combat both the effects and spread of health myths that produce public health risks—such as the rise in un-vaccinated children leading to outbreaks of long dormant infectious diseases (CDC, 2012). Malcolm Gladwell (2000) posits that something is sticky if it is memorable. Sarah Ahmed takes this a step further and says something is sticky if it echoes the past and has an affective (emotive) outcome. Ahmed's version of stickiness is grounded in a performative understanding of emotions, where emotional responses are societally governed. Performativity, which will be discussed more fully in chapter three, posits that words and actions are more than just discursive.

Judith Butler (1989) theorized that there is a materiality of words and actions through the echoing of past utterances and actions. Ahmed, then, takes this understanding to emotions, which situates emotions as learned, social constructions. Furthermore, since emotions have cognitive and physical affect, Ahmed posits that they function as the perfect transmitter of meaning through stickiness.

I define stickiness as the level of lasting appeal a myth has. For a myth to be effective across time and affect to a host of individuals, it must be sticky. And furthermore, it must be sticky at all levels—from the origin, to the way it is enacted, to the way it is remembered. In Ahmed's (2004) exploration of emotions as social expectations and hegemonic ordering tools, she uses the concept of stickiness to understand how the hegemonic orderings of emotions are passed between us. She defines stickiness as "a sign that gets repeated and accumulates affective value" (Ahmed, 2004, p. 90). Therefore, for example, an archetypal narrative is sticky in that it is the foundational narrative by which other narratives are created, transferred or stuck via the emotion it conveys. Furthermore "stickiness involves a form of relationality, or a 'with-ness', in which the elements that are 'with' get bound together" (Ahmed, 2004, p. 91). Every health myth will share one with-ness with every other health myth, and that is the belief that the actions associated with the myth are health-positive behaviors. The set of behaviors of a myth are then bound together, but also bound with other health positive behaviors. "When a sign...becomes sticky it can function to 'block' the movement (of other things or signs) and it can function to bind (other things or signs) together" (Ahmed, 2004, p. 91). Essentially, as the behaviors associated with myths bind to real health positive behaviors, they act to block other health positive behaviors (specifically, those behaviors in regard to the desired health effect of the particular myth).

Ann Cvetkovich traces the institutionalization of Post-Traumatic Stress Disorder (PTSD) from a disorder associated with mental illness/weakness and stigma to one viewed as material and serious by the establishment. “There is a tendency for medical research to become obsessed with scientifically describing PTSD and its symptoms, including biomedical damage caused by trauma... medical diagnosis too often stops precisely where a more exacting analysis is warranted” (Cvetkovich, 2003, p. 45). Cvetkovich argues that this institutionalization of PTSD through official diagnosis, while valuable in the elevation of a previously ignored issue, is also damaging because it centers on finding the cause in the physical. Similarly, VCA is a manifestation of this desire for physical, and therefore material, descriptions to institutionally ground the disorder. VCA fits the single-disease model outlined above and demanded by current discourses of medicine, healthy, and health, which functions like PTSD’s links to physical causes. While grounding the cause in the physical seems to take the discourse of affect and emotion away, the high emotions surrounding autism belies this, essentially, rhetorical move. Furthermore, as metaphoric wounds, trauma acts as a site of affective transference. Turning to Sarah Trimble (2010), who takes her lead from Ahmed, illustrates this point. She posits that situations where emotions run high, such as trauma, nostalgia, or horror movies, prime objects to be sticky because our affective state is more open to outside influences. Like Judith Butler does with gender, to whom Cvetkovich references often, and Ahmed does with emotion, Cvetkovich looks at the social aspects of trauma as a way to deconstruct how trauma functions as an ordering force.

Andrea Phillipson brings these theoretical positions together to offer a concise view of Ahmed’s position on stickiness and how it can be used: "attention [must be paid] to three

distinct, but interrelated parts: the role of performativity, the relationship between movement and attachment, and the importance of 'sticky' histories of associations...feelings become intelligible only through continual reiterations with no singular origin" (Phillipson, 2013, p. 75).

Performativity focuses on the iteration and reiteration of hegemonic norms through their unconscious and willing repetition. Therefore, performativity is also vital to Phillipson's other two criteria because performativity always deals with how norms moves between people and groups of people and also the history of discourse, or how discourses echo. This is especially vital in today's world, where, as Nigel Thrift posits, there is no longer public and private.

Therefore, the movement of norms between people becomes omnipresent (even more so) and the objects become more sticky because their proximity to other sticky objects is closer. In the world described by Thrift, every surface acts a space for affect because "every surface communicates" (2010, p. 296). This necessarily animates the inanimate, as the inanimate is imbued with the history of past interactions. Coupling this with the idea that bodies are "processual: vulnerable to their environments and to others, thus endlessly transforming" (Trimble, 2010, p. 300), illustrates how stickiness may function. In other words, since everything is a piece of communication and highly emotive triggers are readily available, affective meaning can be stuck between objects easily. Through a genealogy it is possible to identify sticky objects and surfaces related to VCA. By exploring texts across multiple realms that include varied viewpoints (e.g. myth believers, myth deniers, doctors on both sides of the debate, parents on both sides, official rhetoric, etc.) it is possible to trace what affects stick across realms and demographics, and therefore to better understand the stickiness of not only VCA, but other health myths.

In chapter three the methodological and theoretical lenses of the proposed analysis are outlined before turning to a précis of the proposed dissertation.

CHAPTER 3: METHOD AND LENSES

Method: Foucauldian Genealogy

As Jerrod Greenberg stated over three decades ago: “knowledge is expanding rapidly. The facts of today too often become the myths of tomorrow” (1978, p. 20). In regard to this project, we could interpret this to mean that myths masquerade as scientific evidence until they become norms and therefore disappear. This type of embedding is hegemonic, as dominant discourses are perpetuated by willing submission to norms that may or may not be *natural* (Foucault, 1972). Given the lineage of myths—from one false belief by one person, spread to a small community through narrative, turned into a norm through repetition in a performative way (Butler, 1990), where the origin is forgotten over time—a Foucauldian genealogy is the appropriate framework to work from in understanding health mythologies.

A genealogy, in the Michel Foucault tradition, is a “French case” study (Bensaude-Vincent, 2001, p. 102), the goal of such a study is to provide a “history of the present” (Foucault, 1977, p. 31). A history of the present might sound counterintuitive, but the goal is to trace the roots of a current cultural construction, or discursive formation, through both the dynamic and mundane moments. Through this exhaustive history of a particular discursive formation, we are able to uncover the mechanisms at work—those restrictive technologies—of today. As Michael Roth (1981) puts it, a history of the present is an “antihistory, or counter-memory” that asks “about alternatives to existing power relations” (p. 45).

The work of a genealogist is necessarily resistive to power formations as it calls into question the current spiral of consent and therefore leaves “one unsure of what a future of

anything will be like” (Roth, 1981). The non-conclusion offered by a genealogy fits squarely within Foucault’s own work and aims. As Foucault described in his 1971 debate with Noam Chomsky, his goals for his work were never to offer a path to freedom or a map to a better society because he did not believe it was possible to offer such conclusions. Instead, Foucault hoped to destabilize the current formations, regulations, and technologies of power by rewriting history—highlight the mundane next to or instead of the monumental in an effort to expose “incoherence contradictions” (Foucault, 1972, p. 151). Only through destabilization and random reorientations after such destabilization can we (humankind) escape from current hegemonic orderings (Chomsky & Foucault, 1971).

While a genealogy may offer chaos, on the surface, it is a systematic set of tools that offer this chaos in a way that helps the genealogist and his/her audience to better understand the discourses in question. David Garland outlines the tools of a genealogist and the goals concisely:

“to anatomize contemporary practices, revealing the ways in which their modes of exercising power depend upon specific ways of thinking (rationalities) and specific ways of acting (technologies), as well as upon specific ways of ‘subjectifying’ individuals and governing populations” (1997, p. 174).

A productive genealogy will lay bare the ways in which discourses subjectify those who subscribe to said discourses. While the discourse at the center of this project, *vaccines cause autism* (VCA), may only seem to effect a few people, a genealogy of VCA will also be a genealogy of healthy, healthy, medicine, and more—which means it effects many—and hopefully through “a tracing of their historical lineages” will “undermine their ‘naturalness’ and open up a space of alternative possibilities” (Garland, 1997, p. 174).

Since the conclusions offered by a genealogy are, in some ways, anticlimactic, it must be noted that the process of conducting a genealogy and the messiness it leaves are noble and worthy goals in and of themselves. In that vein, a genealogical approach necessitates an understanding of power as pluralistic and omnipresent; as invisible and inescapable. This understanding of power is why Foucault detested prescriptive answers and strove for messiness, as messiness is the only true way to disrupt omnipresent hegemonic forces, if only briefly (Chomsky & Foucault, 1971). To think of power in this way, we must understand that:

“power does not seize hold of the individual’s body in a disciplinary grip or regiment individuals into conformity. Instead, it holds out technologies of the self, to be adopted by willing individuals who take an active part in their own ‘subjectification’” (Garland, 1997, p. 175).

For the purposes of this project, it is important to understand the intersections of power at play in a health mythology. This analysis attempts to trace the roots of the cultural forces at play on which the myth has been built, sustained, and passed down. As well as the institutional forces that claim the mythology faulty and/or harmful. This genealogy is supported by a critical rhetoric lens, which, I argue, has goals synonymous with a Foucauldian genealogy.

Critical Rhetoric

Critical rhetoric is part of the cultural, critical, and rhetorical (CCR) theoretical tradition in Communication Studies and combines means and methods from both cultural studies and rhetorical studies (Rosteck, 1999). In an effort to better define CCR, Raymie McKerrow posits that scholars in the CCR tradition might gain clarity if they viewed their field as *critical rhetoric* instead of *rhetorical criticism* (1989). The transposition of these terms, McKerrow argues, demonstrates the shifting role of the scholar CCR. Specifically, CCR places the scholar as part of

the invention process—whereby the scholar becomes the rhetor. One way this shift manifests is through the ways that text/artifact is understood in CCR. Since CCR is no longer interested in being a rubric check-mark machine, what constitutes a text is no longer neat and clean (McGee, 1990). CCR takes a more postmodern/structuralist understanding of the world, so the text/artifact is necessarily viewed as fragmented. This fragmentation is one way in which the critic becomes the rhetor, because a CCR critic must define what the text is. Since the critic is no longer bound to whole texts, fragments and clusters of texts are part of the CCR tradition, the critic defines what is text: “the fragmentation of our American culture has resulted in a role reversal, making *interpretation* the primary task of speakers and writers and *text construction* the primary task of audiences, readers, and critics” (McGee, 1990, p. 274). This definition is a rhetorical move, as the critic must (or implicitly) argue for the chosen fragments as appropriate for analysis, and therefore arguing for those not chosen as not essential to the larger point the critic is making. The fragmentation of text also allows the critic more latitude in the selection of texts.

McKerrow describes cluster analysis as a tool available to CCR critics. A cluster analysis allows for the texts to be disparate in type and source—basically allowing the critic to select whatever they can to make their text. CCR is interested in power and therefore, the sources of text have changed to allow for the study of those who are normally silenced. CCR wants to give voice to the silenced or marginalized. Because of this, a cultural rhetorical studies field allows for more text to be considered text, looks for not only official, but also subaltern and popular understandings of situations, and understands the rhetor to have agency in shaping understanding—so a reciprocal crafting of meaning, in a discursive/social constructionist way (Rosteck, 1999). It is an assumption of CCR that hegemonic power is part of the world, and part of that power is the silencing of many for the prominence of a few. This shift allows for the study

of subaltern texts, as well as a more cynical look at the powers that be. As evident by the focus on power, CCR is interested in the means and technologies of power, wanting to know how the utilization of these means creates reality and power. As such, CCR is interested in questioning what is normal, natural, and True—and also how things come to be normal, natural, and True or the technologies at work. This disposition grounds CCR in a hegemonic understanding of the world and in-line with a genealogy, where the workings of the world are viewed skeptically since these workings are part of a hegemonic machine.

Hegemony is the glue of society—as it regulates social, economic, and political relations through the shared meanings and understandings of the world and how these relations function—and the foundation of CCR. Hegemony is effective because it is microscopic, in that the power of a hegemonic bloc is not seen and it accomplishes regulation through not only willing submission, but willing desire. In other words, the oppressed/marginalized/subaltern are kept that way not through brute force, but through their participation in a hegemonic system (or web). Medicine and health are two discourses that demonstrate how this works. As shown above, the belief that medicine and health are grounded in logical, scientific paradigms allows these discourses to go unquestioned. This allows for a hierarchy in who represents medical knowledge and what represents medicine, which, when bred in a capitalist paradigm, allows the patient and their bodies to be commoditized. Therefore, any study of phenomenon and discourses in and surrounding medicine and health must deconstruct the taken-for-granted assumptions. These taken-for-granted assumptions are at the heart of CCR and, therefore, studies of hegemony. Dana Cloud defines hegemony as “the process by which a social order remains stable by generating consent to its parameters through the production and distribution of ideological texts that define social reality for the majority of people” (1996, p. 117). In the case of medicine the ideological

text include the discourses of health and healthy that regulate the mastery of medical knowledge to specialists, and literal texts that prop-up these discourses—such as insurance, popular culture representations, etc.

CCR attends to the ways that hegemony is perpetuated and sustained, but also to how it changes. The means by which this is done and the systems of hegemony analyzed are disparate, but the goal is (oftentimes) the same, to complicate hegemonic orderings by questioning their assumptions: What is normal, natural, or True? Why is normal, natural, or True? As for the realms analyzed in CCR, they are infinite. This project's interests lie in the normative understanding of health communication, health, and medicine. It is specifically manifested in my interest in health myths. Specifically, I am interested in how health and understandings of health are constructed at an individual and community level, and how these understandings are propagated. Analyzing the texts that promote and deride VCA uncovers what and how is normal, natural, and true for both sides of this debate—exposing the technologies of power wielded by each.

Critical Lenses

CCR tasks the critic with not only the construction of the text(s), but also the choice and deployment of theoretical lenses of analysis. The remainder of this section explores the lenses used in the analysis chapters of this project. It should be noted that each case is grounded in traditional rhetoric and that the first case of chapter 5, the meso-level case of the diagnostic manuals and articles, uses a straight-forward rhetorically analysis. This case is told as a history, where the themes of that history and how they have changed overtime are paramount.

Mythic Studies

Myth, like memory and narrative, is a way to bind people together through identification. Larry Williamson eloquently summarizes the power that myths have over all of us in his analysis of George W. Bush's use of myth:

“No culture is immune to the addictive seductions of this archetypal narrative form that embodies, perhaps more than any other type of discourse, the power of narrative rationality over *logic*” (2010, p. 215).

To understand myth as both archetypal and seductive, we understand them as hegemonic and also foundational. For example, by citing foundational American myths, it is possible to silence opposition and forget injustices. Richard Hughes is able to demonstrate how the enduring injustices of Jim Crow are occluded by foundational American myths and how, hegemonically, those subject to the injustices also buy into and believe in these myths. Cloud's analysis of Oprah Winfrey as a token of Black success in America is a fantastic applied example of how mythic criticism and narrative analysis can work together to demystify power relations. In her analysis, Cloud shows how biographies and public tributes to Oprah craft a life narrative that relies on the foundational American myth of the American Dream (specifically the myths of boot-strap logic and a social ladder). In these narratives, Oprah is held up as evidence that there are no systematic injustices against Black people that would block them from the success that the American Dream promises. In other words, since Oprah is Black and was born into poverty and abuse and is now rich and famous, no one can complain about systematic injustices. Oprah proves those injustices are not real and that hard work and dedication (boot-strap logic) are all that is necessary to succeed. In Cloud's analysis, we see the way that this is weaved into Oprah biographies in a

seemingly innocuous way and therefore occludes the abjective function of both the narratives themselves and the underlying myths which undergird these narratives.

It is important to note that not all mythic analysis has to look at macro-social myths. There are micro-social myths that bind particular communities together. Sonja Foss (2004) discusses ways to study these more particularized myths through her chapter on fantasy theme analysis. Fantasy theme analysis allows a look at how localized myths can chain out into the larger population. Chaining out is the process by which the underlying understanding of the myth remains as it crosses into different domains. Foss uses the appropriation of the “Got Milk” slogan as an example of how this process works. However, I do not view chaining out as a unidirectional phenomenon and I believe grounding analysis of localized myths with an understanding of chaining out as *chaining in*, is an effective way to understand how these myths are compelling and pervasive within the communities that they persist. Foss defines how fantasy analysis involves an exploration into how fantasies are co-constructed and therefore constitutional to group and group identity. Furthermore, she illustrates the ways that fantasies act as a semiotic short hand through themes that are laced throughout. These themes can, and oftentimes do, link outward to larger societal themes/myths.

If we understand myths to be channels of communication and binding agents of communities as the basis for hegemonic discourses, then mythic studies fit squarely into CCR. In other words, myths provide an overarching narrative that conveys a culturally accepted moral. Janice Hocker Rushing (1986) argues that mythic studies allow critics a way to tie together texts that are, on the surface disparate:

“A [mythic] critic...can treat seemingly separate discourses as interdependent parts of a larger ‘plot’ which exists not in linear or chronological time, but in...the ‘configurational

dimension” or “telological time.’ That is, singular rhetorical events may be critically reconstructed into dramatic wholes which exhibit conventions such as reversal, crescendo, catharsis, and denouement by probing the surface of linear time to discover the implicit plot which leads toward or away from humanity’s *telos*” (p. 268).

Through this lens, constructing foundational texts into an overarching myth can then provide the critic with not only an understanding of the technologies of power used to perpetuate a myth, but also the purpose of the myth. That is, mythic studies allow for the study of how myths communicate governing rules, and also, perhaps, the end game of said governing rules. Since, as the foundation of beliefs, myths are “more suggestive than analytic,” they can be better than other technologies of power in maintaining power by occluding “the discursive vagaries often necessary in the maintenance of power” (Williamson, 2010, p. 217). With this idea at the center of mythic studies, it is clear that myths have the power to animate “ideals and values, rendering them as historic antecedents, and in the process” create “cultural truths” (Williamson, 2010, p. 217).

In sum, mythic studies allows the critic the ability to look across realms and texts to understand how different narratives fit together, and also how other rhetorical tools (and technologies of power) work together to create and re-create hegemonic order. Mythic analysis provides a tool for CCR scholars to understand how persuasive messages and particular beliefs that defy logos or self-object can sustain. Myths function as a technology of power and a hegemonic ordering tool. They are pervasive and unseen and therefore seemingly innocuous. As Judith Butler, Foucault, Wendy Brown and others have shown us, seemingly innocuous generally means: actually harmful. Mythic analysis is the primary lens of analysis for the first case of the micro-level (Chapter 4)—Jenny McCarthy. In the analysis of the brand that is

McCarthy it became clear that part of her power rests in the ability of her story and brand to chain in aspects of foundational American myths, including Joan of Arc and Mother Knows Best.

Narrative Analysis

Walter Fisher (1985) posits that people construct their world through narratives. Through this lens, stories are rhetorical tools wielded by the rhetor: “a significant feature of compelling stories is that they provide a rationale for decision and action” (Fisher, 1985, p. 364; in the case of health myths, the decision and action to adopt a belief and attitude). Fisher offered the narrative paradigm as an alternative to a rational world paradigm, which, Fisher argues, wrongly assumes that decisions are made at a cognitive level where evidence is weighed rationally before an action is taken. Instead, Fisher believes that decisions are more guttural and have more to do with emotive responses derived from the stories told about and around a proposed action. The effectiveness of stories as tools is the seamlessness of the story told. Put another way, our understandings of everything, from math to who to vote for in the presidential election, is grounded in our understanding of the stories told about and surrounding these nodes of knowledge. Since we think in stories, we have an understanding of a story that works and one that does not. For a myth to be successful, the story must work.

In my scholarship I see the narrative paradigm as an effective tool to bind Foucauldian understandings of discursive formations to artifacts. Foucault posits *those who control history control the present*. Ladelle McWhorter successfully reorients Foucault’s position on history:

“Let me change the word *rule* to the word *story* and finish Foucault’s sentence: ‘The successes of history belong to those who are capable of seizing the stories, to replace those who had used them, to disguise themselves so as to pervert them, invert their

meaning, and redirect them against those who initially told them; controlling this complex mechanism, they will make it function so as to overcome the storytellers through their own stories” (1999, p. 60).

Foucault constructs the world as a place where meaning is constituted by discourses, where some discourses have more control than others, and where discourses compete to control, but are always in control (autonomy of the individual is an illusion). These discourses create their own set of rules (governing rules) that those who participate in these discourses enact/follow and therefore reify the power of these rules. This is how norms operate at an invisible level, and this is how we are controlled by norms without knowing we are controlled. This is not a very graspable construction of the world. It is dense and abstract. However, McWhorter simply changing the word *rule* to *story*, makes these ideas clearer and more concrete. The idea, whether in its original conceptualization or the reorientation, is clear—storytellers help to craft discursive formations and their governing rules. Therefore, understanding how a story is constructed and what makes it compelling is a way to get at those underlying rules of the larger discursive formation. This is done (at least, one way this is done) through identifying stories used in artifacts or finding consistent stories across artifacts.

Fisher offers two discreet nodes of narrative analysis: fidelity and probability; and Kevin McClure adds the tool of identification. Narrative fidelity is the truth aspects of a story. In Fisher’s words: “Narrative fidelity concerns the ‘truth qualities’ of the story, the degree to which it accords with the logic of good reasons: the soundness of its reasoning and the value of its values” (1985, pp. 349-350). In other words, whether or not a story rings true in comparison to other stories. This can be thought of as external validity—since the audience has heard stories their whole life, each new story they hear is put in comparison to other, similar stories; if a story

has fidelity, then it holds up to these other stories. Fidelity also includes the ethos of the story teller—as the credibility of the teller directly influences how believable aspects of the tale are.

Narrative probability, conversely, deals with the internal aspects of a story:

“the formal features of a story conceived as a discrete sequence of thought and/or action in life of literature (any recorded or written form of discourse); i.e., it concerns the question of whether or not a story coheres or ‘hangs together,’ whether or not the story is free of contradictions” (Fisher, 1985, p. 350).

Keeping with my quantitative metaphor, narrative probability is the internal validity of a story. In other words, do the characters fit the scene, does the dialogue make sense, are the images and motifs reflective of the plot, do the metaphors hang together. Through this description it is obvious how other forms of story analysis can supplement the tool kit of a narrative analysis—from a Burkean pentad (act, agent, agency, scene, and purpose) to Freytag’s triangle (introduction, inciting incident, rising action, climax, denouncement).

One of the major critiques of the narrative paradigm is that even when probability and/or fidelity are not present, some stories are still believed and retold. McClure updated the paradigm to account for this critique (and to account for the critique that the paradigm was grounded in a structuralist worldview in a post-structuralist world) by incorporating Burkean identification. Kenneth Burke is the founder of dramatisic analysis, which includes the aforementioned pentad. In this paradigm a text is analyzed as a drama, complete with scenes, acts, roles, and smaller dramatic elements such as metaphor and allusion. McClure’s update specifically latches onto identification, which can be situated in a dramatisic analysis as an explanation for why

audiences pay attention and care for characters, even if those characters motives or actions are not relatable. To McClure:

“*Narrative identification*, then, is a symbolic process of association that provides for consubstantiality with preexistent narratives *via* the process of analogy, allusion, and metaphor and provides a potential theoretical account for the stretching and reshaping done by auditors of polysemic, polyvalent, and multivalent narratives *via* all of the subtleties and processes of identification” (2009, p. 201).

In other words, Burke helped to move the study of rhetoric away from the study of obviously rhetorical texts (e.g. speeches, advertisements) to the study of texts we encounter every day and therefore to understand how these innocuous seeming texts work rhetorically, the critic must have different tools at his/her disposal. Identification is one such tool, as is narrative analysis. Combining these two tools, McClure argues, allows us to better analyze the effects of these everyday texts. Furthermore, “narrative identification transcends probability and fidelity in accounting for the acceptance of stories by resituating probability and fidelity as two normative forms of rhetorical composition” (McClure, 2009, p. 208). In sum, identification, according to McClure, can override faulty fidelity and/or probability because it is grounded in pathos—which helps to link narrative analysis to affective studies and therefore stickiness.

The second case of the micro-level (Chapter 4) is analyzed through the lens of narrative analysis. In the analysis of the articles from *TIME* and *Parenting*, the need for a narrative lens was evident. Across over fifty years of articles, using multiple angles of inquiry, and with different target audiences, the narrative of what autism means, discursively, remained relatively static. While the narrative did shift over time, the shift was slow and was undergirded by similar themes and tropes. Therefore, narrative analysis provides a compelling lens with which to view

these themes and tropes to better understand their power through fidelity, validity, and identification.

Fragmentation/Composite Narrative/Circulation

Critical rhetorical studies are necessarily studies of fragmented texts, as demonstrated above. This is because the understanding of texts in a critical rhetorical framework is one where texts come from a variety of sources to create a whole. Unlike the lenses outlined above, the tools offered by fragmentation will be necessary throughout this proposed dissertation. This is evident by the scholars who use fragmentation tools within these domains. For example, in Janice Hocker Rushing's mythic analysis of the new frontier, she explains how the reconstitution of textual fragments are at the heart of mythic studies:

“A critic, or a narrative analyst, can treat seemingly separate discourses as interdependent parts of a larger ‘plot’ which exists not in linear or chronological time, but in...the ‘configurational dimension’” or “‘telological time.’ That is, singular rhetorical events may be critically reconstructed into dramatic wholes which exhibit conventions such as reversal, crescendo, catharsis, and denouement by probing the surface of linear time to discover the implicit plot which leads toward or away from humanity's *telos*” (1986, p. 268).

In this description we see the echoes of McKerrow's work. Furthermore, we can see the blending of mythic studies with both fragmentation and narrative analysis. This is an important representation of how the project came together. In other words, this type of methodological blending is necessary for a nuanced analysis.

Memory studies is another lens that relies heavily on fragmentation. Michael Kammen (1991) posits that this type of reconstruction is not solely the in the purview of the critic. Instead,

this type of reconstruction is at the heart of why memory studies exist—to understand how cultures do this reconstruction. The critic’s job is to then deconstruct the culture’s reconstruction and then rebuild a new text to offer an illuminating reading:

“Critics adhering to diverse ideological persuasions have suggested that societies in fact reconstruct their pasts rather than faithfully record them, and that they do so with the needs of contemporary culture clearly in mind—manipulating the past in order to mold the present” (Kammen, 1991, p. 3).

Here again the way that the past informs the present is paramount. The past, presented in the present, is really a rhetorical tool of the present, and therefore dominant, hegemonic blocs. Jason E. Black (2007) elaborates on how the critic wades through this deconstruction-reconstruction process by reconstructing not just the dominant discourse in a new light, but also the subaltern discourse. He calls the process “a fused approach” (p. 207); a metaphor that brings to mind welding. In other words, Black wants us to view textual analysis of multiple texts that come together to inform our understanding of memory as a process of creating a new whole out of existing pieces.

Another important aspect of a critical rhetoric is the understanding that texts are not static. As dynamic entities, texts are temporal and also context-driven. As such, the same text can mean different things at different times and different things to different people and different things when presented in different ways. This becomes more important as technology allows for more manipulation of texts, and also vital to the understanding that a critical reading of a text is also dynamic. Circulation studies takes these issues into account, tracing texts as they are put into different context and reconstructing their meaning based on these variant contexts. In other words, scholars “must attend not just to the text’s appearance but, as Foucault suggested, ‘its

reappearance,' its circulation” (Heidt, 2012, p. 626). Black (2012) takes this a step further and posits “that discourse must be examined with context in mind. It is not enough simply to state that discourses are fragments that ‘transport’ meaning through a culture. Rather, their intertextual dynamics must be explored” (p. 641). In studying circulation, we are studying how the text not only talks to the surrounding discourse milieu but also how it talks to itself. In this view, texts that are circulated in multiple contexts are always intertextual. Furthermore, circulation studies allow us to better understand communities, as the patterns of text circulation and recirculation within communities exposed the foundational beliefs of said communities. In the case of VCA this is especially important because the community is physically dispersed and therefore relies on these patterns to cohere—electronic communicative tools, then, “creates a false sense of community” (Finnegan & Kang, 2004, p. 383). In this view, communities like those surrounding VCA can be viewed as rhetorical constructions in and of themselves, which allows for an intertextual look between the community and its foundational text—exposing what sticks between these two technologies of power.

While fragmentation is used throughout the analysis, circulation is particularly vital to the second meso-level case (Chapter 5). In this case, the way that empirical articles that link the cause of autism to environmental triggers is traced across both pro-vaccine and anti-vaccine groups. Therefore, the case itself is a case of recirculation and the findings display how proof, in the right context, can bolster opposing sides of the same argument.

Performativity

Performativity is the theory that words do more than say, words constitute (do). Moreover, actions do more than act, actions constitute. Contemporarily, performativity has been developed by the gender scholar and Foucault disciple, Judith Butler. Butler grounds her theory

in the body and the constitution of gender. To understand how performativity can be used as a method for CCR scholarship, a glance at its history is enlightening. First developed by John L. Austin in 1939 as a way to explain how certain words had more power than other words, performativity has always been interested in the power of language: “Austin, first formulated the concept of ‘performativity’ in 1939... if a person makes a performative utterance, Austin stated, ‘he is *doing* something rather than merely *saying* something’” (Weiss, 76). In Austin’s original conception, performative utterances were those utterances that did more than create meaning, they were those utterances that had a materiality to them. His examples included the binding effect of “I do” in a marriage ceremony and the future action guaranteed by a promise. Stuck in the binary logic of performative/non-performative, Austin abandoned the theory.

However, performativity was given new life by Jacques Derrida, who posited that performative utterances are only performative because of the socially accepted effects of these utterances:

“Derrida pointed out that it is not intentionality that gives a performative its world-changing potential, but rather the performative’s (that is, the speaker’s) inevitable reliance on citation—the explicit or implicit invocation of preexisting conventions, norms, or sources of authority” (Weiss, 76).

He understood these effects to be possible due to the citationality of language. In other words, each performative utterance is only performative because it cites previous usage, thereby citing previous material effects of said utterance. Butler took Derrida’s citationality, which still grounds the performative within a very specific kind of utterance, and moved it to the everyday through gendered choices. These choices include everything from someone’s walk to someone’s dress.

To Butler, each performance that falls inside the heterosexual matrix¹⁴ adds to the citationality (or in Butler's terms—echo or sediment) of those acceptable actions, thereby reifying the heterosexual matrix. The performative action is successful when the echoes of prior actions have bound together to make the performative action an everyday action. This everydayness is what occludes a performative action from being interrogated and therefore becoming the *norm*. The everydayness of Butler's performativity has drawn some criticism because it does not allow for change. However, this everydayness and pervasiveness is what makes performativity a compelling tool for the CCR critic because everydayness is the crux of CCR and what really moved CCR away from traditional rhetorical studies.

Performativity allows CCR critics to expose fissures in logic within discursive formations, because performative actions are part of the everyday common sense understandings of how the world works. This type of exposure is exemplified by Butler's study of discourses surrounding the intersex and transgendered communities. In *Undoing Gender*, she demonstrates that these communities are performatively erased, and in an effort to gain rights, they have begun the process of creating citations for existence. In the case of transgendered persons, this citationality comes about in the institutionalization of their *condition* in the DSM. While this abjects transgendered persons through pathologization, it also allows for recognition of their chosen performance and therefore insurance money for sex-change operations. The hill is a little steeper in the intersex community, as the data for how many babies are intersex is not available/accurate and the operations to *correct* intersex babies generally happen without notice or consent. However, Butler traces the rhetoric of the movement, which is focused on awareness-raising as an action of citationality.

¹⁴ The heterosexual matrix is the matrix of acceptable gender performance available to all; or each performance that falls outside the matrix as these create the constitutive outside.

Defining health myths as discourses of power through their ability to regulate behavior, allows for performativity to be a powerful tool. In other words, if a myth is believed, then those behaviors associated with a myth are enacted. After being enacted multiple times, these behaviors are felt to be *natural* or *normal* and eventually they become routinized. This routinization can be thought of as a performative act. Health mythologies must act performatively to be pervasive. A health mythology has health behaviors linked to it and these behaviors are, according to the mythology, health positive. When the behaviors are enacted by a subscriber to the myth, than that is one repetition. Both individually and communally then, these behaviors are performative as they construct the discourse of the myth for those who subscribe to the myth. It is important to note that "What performativity has to offer rhetorical studies is a perspective on the agential potential that texts offer audiences, not an analysis of how that offer is taken up" (Just and Christianson, 322). In the case of health myths, it is not possible to trace the cause and effect of a performative echo, but it is possible to analyze what the texts offers as possible performative acts.

Beyond the performative aspects of behaviors repeated by myth subscribers, an analysis of how the community of myth believers formed and continues to thrive can offer another performative angle of analysis. Specifically, the performativity of social movements. Phil Brown (1995) argues that social movements galvanized around medical issues are foundational to what is deemed important and therefore institutionalized within the medical community. Within this framework, Brown points to examples of the women's health movement, environmental health issues (such as poisoned groundwater), occupational safety, and disability rights and issues. Clearly, the ways that the community formed around the myth at the center of this analysis shares qualities with these movements. One reason that this project is a bit problematic is that it,

in one way, grants power to the establishment through the assumption that this particular myth is wrong. This grants power to the establishment because it is the same conclusion the establishment posits. However, as shown above, critical rhetoric and social constructionist looks at medicine and health are weary of the establishment. In the case of critical rhetoric, one of its goals is to give voice to the silenced or marginalized, which, in this case, would be the myth believers. In the case of social constructionist, the belief is that critique stemming from lay persons “are often central to the discovery of diseases and conditions” and that often it takes generations for those laypersons who offer these critiques to be heeded (Brown P. , 1995, p. 43). Nevertheless, this project seeks to give voice to the silenced, who are those subject to both the discourse of the established world of medicine and the established world of this myth.

The first case study of Chapter six employs a performativity lens. Given the format of the artifact, Congressional hearings, this lens provided compelling richness to the analysis. The performance of the hearings, coupled with the intra- and extra-hearing citations allowed performativity to be the ideal lens.

Memory

An additional lens of analysis that proved fruitful is collective memory. Collective memory is the study of how events are remembered and collectively constructed (Sturken, 1997). These studies traditionally analyze public memorials of certain events (e.g. the Vietnam War Memorial, the AIDS quilt), but using a wider framework of logos and white papers of organizations and public institutions provides similar grounds for analysis. While collective memory is closely related to narrative analysis (Sturken, 1997, p. 7), it allows for a more political look at events. This political angle comes from the way that powerful institutes generally control how events are remembered through the selection and curation of objects of memory, essentially

creating an institutionally sponsored version of memory (Cvetkovich, 2003). Memory studies reach into collective and institutional understandings of events and phenomena. Maurice Halbwachs's foundational work on collective memory shows how we are interconnected to one another and posits that the only time our mind is independent from others is within dreams. The work traces the ways that memories are context and institutionally contingent—specifically looking at family, religion, and class. Halbwachs defines institutions broadly and shows how language is one of those institutions that links our memories and how we remember.

Interestingly, he dives into how and why we mark certain dates with celebrations (births, deaths, marriage, holidays, etc.) and makes a compelling case that these are landmarks that link us to one another. Essentially, if we must gather to celebrate, then we gather to make a collective memory, that can then serve as both a landmark for the relationships of and between everyone who gathers, and also for the recollection of the event. His analysis demonstrates the performative qualities of memory and therefore the hegemonic qualities inherent in memory, since we cannot escape the frameworks of society when we remember. When viewing health myths through a collective memory lens, how the myth is catalogued by both the institutions that prop up the myth and those that detract from it are important sites of analysis. This cataloguing includes the stories, characters, settings, and themes that the myth functions within and also the roles the myth prescribes to its followers. These roles link back to Halbwachs' analysis of family, where he successfully demonstrates an easy way that the frameworks of society afflict our memory. Specifically, the echo, or history, of family relations that, within a certain society, defines what a dad, mom, brother, sister, aunt, etc. is provides the framework for these relations to develop and for the interactions of these relations/moments within these relations to be understood and remembered.

Contemporary memory scholars understand these intuitions to be both localized and hegemonic. Specifically, family is created and recreated every day in each person's home, but it is also created and stabilized via more institutional powers, such as museums, literature, and popular culture. Barbie Zelizer's work in collective memory brings hegemonic power to the forefront of memory studies:

“Collective memory thereby presumes activities of sharing, discussion, negotiation, and, often, contestation. Remembering becomes implicated in a range of other activities having as much to do with identity formation, power and authority, cultural norms, and social interaction as with the simple act of recall” (1995, p. 214).

In health and medicine the negotiation is typically done outside of the patients' purview. Those who control the official history (both in institutional health discourses and health myth discourses) therefore draw the roles of the subjects of those discourses. Bernard Armada shows how cultural narratives and myths are weaved in through the official history as part of the logos of the history. When studying health and medicine, the collective memory may be replaced by the norms of behavior within those discourses (e.g. doctor-patient interaction). Health myths then run through and, sometimes, counter to these norms. Memory studies allow for a complementary theoretical angle to understand why certain myths pervade while others are ephemeral. If it is possible to locate the performative norms that propagate myths, then it is possible to find the sites of institutional, and collective for that community, memory for those myths. Chaining these sites out to larger, macro-social discourses may provide clues as to why VCA stuck.

While collective memory is the collective construction of past events the real power of collective memory is the effect on the present: “one of the truths about collective memory is that it is as much about current needs as about the events and people of the past” (Hume, 2012, p.

182). In other words, the way that autism institutionally remembered through logos and public health campaigns lays the foundation for the acceptable narratives used to understand autism within the public. Coupling a collective memory analysis of autism with one of vaccines, in addition to the narrative and performative analyses, provides a robust picture of how and why a myth is created and sticks. It should be noted that this type of analysis is not monolithic and has been used to great effect for a variety of projects and in a variety of ways. Black's study of the Horseshoe Bend museum demonstrates the way that a dialogic or dialect reading of both the institutional and subaltern voices exposes the silencing and also the power of the subaltern. In this tradition, this proposed dissertation examines how holders of power on both sides of this myth arrange the same facts to create their own version of the memory of how autism is caused.

The final case study of Chapter six, and this project at large, utilizes collective memory as its lens. In the initial analysis of *Generation Rescue* and *Autism Speaks*, it became clear that the organizations crafted divergent histories of autism. Furthermore, each organization grounded the audience in different social roles, which folds into Halbwach's original construction of collective memory.

Précis

The theoretical lenses offered above are the lenses that revealed themselves after the initial close textual analysis and construction of each artifact. However, these lenses are not mutually-exclusive. Therefore, when appropriate other lenses are used to supplement the primary lens in each case. Chapter 4 the micro-level is analyzed through two cases drawn from popular culture. First, Jenny McCarthy the brand is analyzed through a mythic analysis lens. Second, the coverage of autism from *TIME* and *Parenting Magazines* are analyzed with a narrative paradigm lens. Chapter 5 moves on to the meso-level analyzing the medical realm through the diagnostic

history of autism in case 1 and the circulation of the empirical proof of VCA in case 2. The first case is analyzed with traditional rhetorical tools, or close reading with thematic threading and juxtaposition. The second case engages circulation, recirculation, and fragmentation to better understand how articles are employed as proof on both sides of the VCA debate. The final analysis chapter examines the macro-level by studying the institutional sanctioning of VCA and autism. In the first case Judith Butler's performativity is utilized to explore the ways that the theater of the Congressional hearing on VCA produce and echo behaviors that sanction VCA both intra- and extra-hearings. The final case of the chapter and this project utilizes a collective memory lens to better understand how governing bodies on both sides of the VCA debate frame the memory of autism to further their own positions. In Chapter 7, the findings of each of these cases are brought together to offer implications for health myths at large and the function of affective stickiness in the production and distribution of myths. Finally, implications for how ethos is changing in a post-structuralist world, the melding of narrative and mythic paradigms, the narrative paradigm at large, and the problems produced by the need for interpreters between the scientific world and lay world are offered.

CHAPTER 4: MICRO-LEVEL—POPULAR CULTURE ANALYSIS

This chapter is an analysis of *vaccines cause autism* (VCA) myth in the popular culture realm. As channels of information become more plentiful, credibility becomes harder to judge. As such, those channels that influence us that we deem credible become more powerful. Furthermore, as we become more accustomed to the saturation of media in our lives through our smartphones and constant connections, the sources of our trusted information seem more and more familiar.

As I argued in Chapter 2, the popular culture realm in this analysis is being treated as the micro-level of influence in the social construction of health, which Phil Brown claims includes discourses like “self-awareness, individual action, and interpersonal communication” (1995, p. 37). My contention is that the parasocial relationships we have with celebrities allow popular culture to function as this realm today. In this chapter I will begin with a brief conceptual definition of parasocial interaction before turning to analysis of the brand of Jenny McCarthy and her impact on VCA, and the mediated narrative of VCA in *TIME* and *Parenting magazines*.

Parasocial Interaction

Parasocial interaction is a theory in media psychology and communication studies that describes the phenomenon of media consumers feeling as if they have an interpersonal relationship with media figures (Horton & Wohl, 1956). Even in the original conceptualization of this phenomenon, the conclusion asked readers to explore “how these parasocial interactions are integrated into the matrix of usual social activity” (p. 225), a call that was echoed nearly 50 years later in earnest (Giles, 2002). In the coming section, I attempt to show how McCarthy positions herself as identifiable to her audience, and therefore integrates herself into their normal

social worlds. The working definition of parasocial interaction I use is: a phenomenon where a non-media figure incorporates a media-figure into his/her own social network (Lather & Moyer-Guse, 2011). While the subject (non-media figure) may cognitively know that their relation with the object (media-figure) is one-way, the way said subject feels and thinks about said object is not substantially different from two-way social relations. While Dana Cloud's (1996) exploration of Oprah is not framed as a parasocial interaction study, I believe at its core, it relies on the reader's understanding of how parasocial interactions work. In Cloud's analysis she explores the brand of Oprah through public appearance and biographies. Oprah is shown to be a token of the American dream—a safe and relatable figure that audiences can identify with through the bootstrap logic she embodies without having to deal with any real discussion of racial disparities. I view Cloud's study as a guide for how I incorporate parasocial interaction into my mythic analysis of Jenny McCarthy. Parasocial interaction is not directly engaged in the second case of this chapter, but is still vital to the choice of the artifact for the micro-level. Specifically, I extend John Hoerner's work that demonstrates how a parasocial relationship is not exclusively relegated to celebrities or even people. Hoerner (1999) shows that websites can function as the stand in for what is traditionally a celebrity in a parasocial relationship—where the website has a unique character through the content published and the user becomes familiar with this character and forms a one-side relationship (Hoerner, 1999). I posit that this parasocial relation with a non-human entity can also form with a magazine if said magazine has a signature style—which both *Time* and *Parenting* do.

Case 1: Jenny McCarthy

Jenny McCarthy—the comedian, author, actress, and Playboy Playmate—is the major celebrity force behind Generation Rescue and its perpetuation of VCA. Since this myth is viewed

as dangerous by the medical establishment (Kata, 2012; CDC, 2012a; CDC, 2012b) and celebrity influence has been shown to be an important factor in the adherence to this myth by the public (Freed, Clark, Butchart, Singer, & Davis, 2011), it is important to understand the intersections of meaning-systems between celebrity and this myth. McCarthy is a major contributor to the social understandings of autism and vaccines, and therefore, her character and persona represent an ideal text for analysis to highlight these intersections. This section uses a mythic analysis of McCarthy's three books on autism to explicate the construction of McCarthy as a savior in her self-manufactured Joan of Arc narrative, which grants her the ethos needed to spread these myths and influence the social understandings of autism and vaccines. Other artifacts with McCarthy at their center are spread throughout the remaining sections of this project, as McCarthy haunts VCA like a specter. Specifically, in the second section of this chapter, McCarthy comes up in a *TIME* Magazine article; in Chapter 5 McCarthy is embedded within the recirculation section, as anti-vaccine groups place McCarthy in the same pantheon as the articles which form the basis of their organizations; and in Chapter 6 her *Generation Rescue* is analyzed in comparison to *Autism Speaks*.

Celebrity and Branding Semiotics

McCarthy uses her position as celebrity to craft a brand that encompasses knowledge of health, specifically in the realm of autism, and she concomitantly crafts herself as a savior against the conspiracy to spread autism by the vaccine companies and the federal government. This project understands brands as meaning systems that are co-constructed by both the consumers and producers of the brands. Following Jason Berger (2001) and Cloud's (1996) perspectives, celebrities are viewed as brands, where the public understanding of each celebrity may not match who the actual celebrity is, but instead forms a meaning system that marks the

celebrity. Like Cloud's analysis, Berger demonstrates the ways the meanings of a celebrity brand are both in the control of the celebrity and also, paradoxically, in control of the audience. Specifically, he showed the careful crafting that Buffalo Bill used to make a certain persona that aided in the sales of his brand (e.g. the sales of tickets to his show). This persona then became public where the meaning was interpreted and perhaps changed by the audience. Furthermore, Berger illustrates how celebrity brands are tied to extant meaning systems within the greater culture, as celebrities, by definition, are part of popular culture. In the case of Buffalo Bill, the understanding of his brand was and is tied to popular understandings of the American frontier, the old west, rodeos, etc. As much as Buffalo Bill's brand was and is influenced by these other meaning-systems, he also has a dialogic or reciprocal influence on these systems. As a meaning-system, McCarthy's brand is in conversation and negotiation with other meaning-systems such as *autism* and *vaccines* (and Playmate and comedian, etc.), which affords McCarthy influence on these other meaning-systems. However, the strength of McCarthy as an identifiable brand is tied to her embodiment of the myth of Joan of Arc within the manufactured myth of VCA.

Artifact

The artifacts of this analysis are McCarthy's two sole-authored books, *Louder than Words: A Mother's Journey in Healing Autism* (2007) and *Mother Warriors: A Nation of Parents Healing Autism Against All Odds* (2008), and her dual-authored book with Jerry Kartzinel, MD, *Healing and Preventing Autism: A Complete Guide* (2009). As McKerrow (1989) points out, a critical rhetorical examination can be a cluster analysis in our post-structuralist understandings of the world. In other words, since the understanding of what constitutes a text is no longer neat or clear, defining the text is part of the task of the critical rhetorician. In a way, the critic becomes a rhetor, as their structuring of the texts influences a particular reading of these texts and, in turn,

of the larger discourses being analyzed (McGee, 1990). The reading offered here is not purported to be the only or dominant reading or as a sort of truth, but instead, concurring with Brenda Cooper's (2002) framing of criticism, used to offer "a process of argumentation whereby the general goal is to convince readers that their own insights into a text may be enhanced by reading the text similarly" (p. 49). This type of reading "can be useful to uncover the normative themes of the narrative" (Avila-Saavedra, 2009, p. 10), functioning as an oppositional reading to uncover some of the mechanisms of normalization and power beneath the text. With these understandings of text and analysis in mind, the texts that serve as the universe of analysis for this project were chosen because I believe they represent a comprehensive sampling of the texts that tie the meaning-system of McCarthy's brand to autism and vaccines.

This cluster analysis traces the multiple themes and images employed by McCarthy through her carefully-crafted and edited authorial persona. These themes and images are analyzed for their co-creation of the authorial, and therefore, public persona of McCarthy. The way these themes and images link to one-another and, eventual, chain-in the myth of Joan of Arc are explored to expose the cultural production of McCarthy from these artifacts. Furthermore, rhetorical devices employed in the narratives are explored, demonstrating the complex interplay between McCarthy and the myths she promotes, which create the "commonsense consciousness" (Berger & Luckmann, 1966, p. 23) that undergirds these myths.

Analysis

McCarthy crafts a narrative of autism through her son, Evan. Evan was diagnosed at two-and-a-half after a month long fight with seizures. In the first third of her book, *Louder than Words*, McCarthy describes, in detail, how Evan went from a so-called *normal* child to one afflicted with unexplainable seizures, which left him a shell of himself. This shell is described in

explicit detail and includes nights in the hospital, a cardiac arrest, countless invasive medical tests (including spinal taps), moments of violence (by Evan), a loss of language, and a loss of the *soul in his eyes*. The remainder of the book describes how McCarthy fought for (and obtained) a cure to autism once Evan was diagnosed, dismissing her doctors' insistence that no cure existed. This book lays the foundation for the Joan of Arc myth for McCarthy to occupy, as will be developed more fully in the summation of this section. Interestingly, there is no explicit reference to the myth of VCA as it relates to Evan within this first book. Actually, in the chapter that Evan is diagnosed, McCarthy thinks back through Evan's life and identifies behaviors that were clear warning signs of his eventual diagnosis.

While McCarthy's first book focuses on recovery, her second book, *Mother Warriors*, is more an indictment of the medical establishment. It is in this book that VCA is used to describe Evan. *Mother Warriors* follows McCarthy as she does the media circuit for *Louder than Words*. In the behind the scenes look at the media tour, we get to feel McCarthy's anger toward the establishment (both medical, which was also fostered in the first book, and media) and pleasure in making the establishment angry through her spreading of VCA. The fact that the myth is at odds with early warning signs she described in her first book is never addressed, instead it is as if those parts of the book were never written.

Ethnomedical Understandings of Symptoms. The disease-centered approach to medicine and health is commonly known as the biomedical approach and focuses on a disease as independent from the rest of the person—at least in its crudest form (Kertakis, Franks, & Epstein, 2009). With this narrow focus, this worldview necessitates each disease or malady be treated independently, thereby pushing providers and patients to become over-reliant on pharmaceuticals and innovative technologies or procedures (Kertakis, Franks, & Epstein, 2009).

One of the most striking rhetorical strategies employed by McCarthy is the framing of Evan's symptoms in an ethnomedical worldview where each symptom has a double-meaning: the doctor's meaning and McCarthy's meaning, which is necessarily counter to the doctor's meaning. What makes this construction so compelling is that McCarthy spends most of her time complaining that the doctors do not know what they are doing because they do not *know* her son, and therefore pigeon-hole him into a medical, one-size-fits all diagnosis. However, she does not leave this one-size-fits-all worldview; instead she just offers an alternative explanation for autism within the disease-centered model of health. This framing leaves McCarthy's belief that her son was infected with autism via the measles, mumps, and rubella (MMR) vaccine to faith. This faith, which McCarthy notes is in line with her Catholic upbringing, but at odds with her current secular ways, is the first clear link to Joan of Arc—as the Joan of Arc myth is grounded on the belief that Joan heard the voice of God, which commanded her to lead her country to freedom.

The myth of VCA is the perfect exemplar of this disease-centered worldview. McCarthy claims that her son was infected with autism by his MMR vaccine and that she was able to cure him through experimental, and innovative, science (McCarthy, 2008). With a disease-centered understanding of health as her GPS, McCarthy sought cures from everywhere, from practitioners who some call “purveyors of snake oil” (Wallis & Goehner, 2006). In McCarthy's case this trail of expensive treatments—from hyperbaric oxygen chambers to electromagnetics to diets to multiple therapies—was worth it because her son was “cured” (Greenfeld K. , 2010). Furthermore, this trail was only possible because she was compelled by her *faith* to follow it. However, for thousands of others, no such cure comes and in the meantime, their finances dry-up (Goehner, 2006). McCarthy, and her like-minded followers, still hold Wakefield in high regard, and will let nothing deter their belief in VCA. This persistence is consistent with the disease-

centered worldview, which can be partially attributed to “our era’s strained relationship with scientific truth, our tendency to place more faith in psychological truths than scientific ones... in McCarthy’s world there is scientific truth and there is emotional truth” (Greenfeld K. , 2010).

McCarthy lends fidelity to the overall myth of VCA through her anecdotal and real life example of her son, which is at odds with the empirical studies. While her ethnomedical understanding of Evan runs counter to the empirical work, her reliance on the biomedical model which these studies are founded on is evident, paradoxically, through this example—as Evan is the quintessential lab rat. Furthermore, she adds layers to this n of 1 experimental, anecdotal account by telling other mother’s stories in *Mother Warriors*, which are all similar in structure. Before moving on to the stories themselves, it must be noted that the title of the book creates the first direct link to Joan of Arc, who was a warrior. Furthermore, by making the title inclusive of the mothers whose stories McCarthy tells, she provides a point of identification, which is vital for her parasocial relationships. In these stories, McCarthy relies upon the understanding that most readers will have had similar stories. Not necessarily with their children being afflicted with autism, but with the more basic story of bringing their children into the doctor for vaccines and the worry that accompanies the pain of the shot itself and the potential flu-like symptoms that often follow. By using this common story, McCarthy is able to attach the larger version, VCA, to the fidelity of the shorter version. Furthermore, the fidelity of other common stories are attached to the longer version. Specifically, the fear of vaccines that is endorsed at a societal level by the federal government through the 1988 creation of the Vaccine Injury Compensation Program (as will be more fully explored in Chapter 6). The adverse effects of vaccines are perpetuated at a very public and national level in other ways too, as evident by Michelle Bachmann’s claims of the Human Papillomavirus (HPV) vaccine causing “retardation” while

running for the Republican nomination for president in 2012 (Weiner, 2011). Also, the fact that there are pathogens within vaccines, and the process of vaccination itself lends credence to, at least, the fear behind these myths: “Any rite of passage that involves jabbing needles into small children is bound to worry more than a few parents” (Gorman, 2002).

The disease-centered approach is also evident in the research McCarthy does, as she continues to look for an answer, versus reframing her understanding of health. For instance, she writes, “I decided to start doing some research and by research, I mean google... By the end of the book, you will see that I should have a doctorate in google” (McCarthy, 2007, p. 11). McCarthy goes so far as to buy an electroencephalography (EEG) machine to hook up to her son while he’s at home. She starts to train herself with Google on how to read the output and concludes that her doctors are not reading the output right. Her actions are relatable when framed by the biomedical model—in other words that there is an appropriate cause to autism, one that could be misinterpreted, because Western understanding of science separates disease from the person and invites a causal logic. By peppering her accounts with examples of the doctors *misreading* signs and instrumentation, and then demonstrating her aptitude to appropriately read these same signs and instruments, her crafted persona not only rings true, but also heroic—it rings true from the disease-centered model of health and heroic from the myth of American hard work. In other words, McCarthy’s research shows that she is willing to put in the necessary hard work to solve her son’s problem. This relies on bootstrap logic (Hughes, 2003), a foundational American myth, and is therefore relatable. In other words, the bootstrap logic myth states that in America any goal can be accomplished with enough work, and McCarthy displays the belief in this myth through her studies at Google university. Furthermore, this clearly ties McCarthy to Joan of Arc.

While Joan of Arc is a French myth, it has been appropriated by American culture. This appropriation has come through movies, plays, and other forms of artistic expression. However, the most direct linking of Joan to foundational American myths has been her use as a call to arms in time of war. Posters with an armored Joan were part of the US Treasury's campaign to compel women to buy war bonds (Dolgin, 2008). These posters included sayings such as "Joan of Arc Saved France: Women of America Save Your Country Buy War Stamps" (p. 112) and "Women Your Country Needs You" (p. 4). These posters display Joan as a warrior ready to work for her country, because that is her duty. Her work is supposed to inspire women through the culling of the myth of American work ethic (Dolgin, 2008). While the posters of Joan of Arc are not ubiquitous, the theme is carried on in other calls to arms for women of America through Rosie the Riveter and the "Gee! I wish I were a man. I'd Join the Navy" (Dolgin, 2008, p. 106)

Building Ethos through Pathos. McCarthy's main appeal for ethos comes in the form of pathos. When telling her story about Evan, she describes her emotions in detailed ways that compel the reader/listener to sympathize: "Even though I was happy he was awake, my heart sank at the loss of his soul in his eyes" (McCarthy, 2007, p. 6). This description comes early in her first book when she describes Evan waking up from his first seizure episode. We feel her pain, as despite the recovery, she still does not feel that her son is all there. She furthers this type of description as his autistic symptoms manifest more concretely: "he was in a world unto himself" (McCarthy, 2007, p. 37). And then she steps up the appeals for sympathy when the diagnosis of autism is actually handed down: "I died in that moment" (McCarthy & Kartzinel, 2009, p. 2). This type of heightened language focusing on how McCarthy is being robbed of her true son is a way to build her credibility as a victim and therefore someone capable of fighting

back. She has more direct ethos appeals when it comes to credibility in knowledge realms, as will be discussed in the following sections.

The foundations of McCarthy's books are pathos-based, allowing for the reader to identify with her pain. The most effective angle that McCarthy builds this point of identification is through the descriptions of her physical reactions to the emotions she is feeling. These reactions range from simple crying fits to her yelling at doctors, from driving recklessly through the snow to accosting an ambulance driver, from sleeping beside Evan for months to not sleeping at all, from vomiting to curling up into a ball on the floor. The functions of these physical descriptions are to show the vulnerability that the situation is inflicting. This vulnerability allows the varnish that celebrity seems to have to be muddied. In other words, these pathos driven actions turn McCarthy into a *real* person, presumably moving her away from the *fake* celebrity that she is. She shows real human emotion and vulnerability and therefore she builds her ethos as a feeling person first, and a feeling mother second.

Crumbling the Establishment through Superiority. One of McCarthy's primary aims is to build ethos in the realm of *autism*, thereby attaching her extant brand to the discourse of autism. As shown, she attempts to accomplish this by building an operative logic in her ethnomedical worldview that then becomes traditional logic through linking to other, more established narratives (those of fear and conspiracy). Another angle in which McCarthy builds her ethos is through character witnesses. Each of her sole authored books feature forwards by medical doctors who, according to their credentials, are experts in autism. Her first book has a forward by Dr. David Feinberg, MD, MBA, who was the medical director of the Resnick Neuropsychiatric Hospital at UCLA; and an introduction by Dr. Jerry J. Kartzinel, MD, FAAP (who she would later go onto to co-author a book with). Her second book features a forward by

Dr. Jay N. Gordon, MD, FAAP, Assistant Clinical Professor of Pediatrics at UCLA Medical Center. With just the credentials and institutions of these forward authors, McCarthy is explicitly building her ethos in the medical world. Through their inclusion within her books, these doctors explicitly endorse McCarthy's ethnomedical worldview. Furthermore, within the pages of these forwards, each author states clearly that McCarthy should be trusted in her assessment of how autism functions within the medical world of today. One example of an explicit endorsement comes at the coda of Feinberg's forward when he lists the lessons McCarthy imparts through her book: "...We learn about a disease and about how others dealing with similar circumstances can aid one another. We learn about alternative approaches that seem promising. We learn that being famous doesn't mean things come easy" (2007, p. xiii). This quote displays the two strategies employed in these forwards. The aforementioned first strategy is to build McCarthy's ethos as a quasi-medical expert. And the second is to empower the reader through the grounding of McCarthy as an everywoman, furthering the work that her pathos-driven descriptions do. In this case, Feinberg grounds McCarthy by stating that her fame does not aid her in her journey to fight autism. This type of framing is echoed by McCarthy in her descriptions of herself within the books. It is also undergirded by the mother's intuition narrative established below.

Paradoxically, employing doctors to establish ethos is at odds with another major strategy and narrative McCarthy employs. Specifically, McCarthy spends much of her time dressing down or putting down doctors in the medical establishment through superiority humor. These doctors are the ones who disagree with her intuition and become the butt of McCarthy's jokes, most of which aim to establish her own ethos while stripping theirs.

Superiority Humor about Doctors. While McCarthy does not don actual armor in the fashion of Joan of Arc, she dons metaphoric armor in the form of humor. McCarthy is a

comedian by trade, therefore it is not surprising that one of her primary rhetorical tools is humor. Given this, the lens of humor is added into the analysis to better understand the ways in which McCarthy is crafting her mythic persona. John C. Meyer (2000) argues that humor sets perceptions of normalcy and then breaks those norms, which can paradoxically encourage or inhibit individuals from feeling included in groups. Further, a single instance of humor can have different effects for different audience members (Lee, 2010). Thus, “humor can have both uniting and divisive effects within and between communicating parties” (Meyer, 2000, p. 317). Humor research in the field of communication generally categorizes the motivations for humor into three common theories: superiority, relief, and incongruity (Lynch, 2002). McCarthy primarily employs superiority humor in an effort to form group cohesion (with her audience) via differentiation (from her detractors). “Superiority humor is usually associated with laughing at others’ inadequacies” and can be used as both “a mechanism of control or a form of resistance” (Lynch, 2002, p. 426). McCarthy uses superiority humor to build her ethos by stripping ethos of those in the medical establishment.

While the humor used could easily be seen as an identification device, it also serves as metaphoric armor for McCarthy, bolstering her warrior persona through the belittlement of the establishment. More specifically, the humor McCarthy employs is that of superiority, where she looks down upon doctors and other healthcare providers caring for her son, and therefore places herself (and, in turn, the audience) over these healthcare providers. This rhetorical move serves as both identification (with her audience) and differentiation (from the butts of the jokes).

The first instance of this type of humor occurs in *Louder than Words* when McCarthy is in a conversation with a doctor after Evan’s first seizures. McCarthy cannot believe that the doctor would suggest that her son had an underlying illness previously or had bumped his head

significantly: “I stood there in shock and silence because I couldn’t think of a polite way to say, ‘You’re a fucking idiot’” (McCarthy, 2007, p. 8). In the context of the book, we are supposed to laugh at the doctor’s inability to know that Evan was fine. This type of vitriolic humor continues with the next emergency room visit when the team working on Evan (three weeks after the first visit) is asking the same questions the first set of healthcare specialists did: “from the looks on their faces, I could tell that they were confused. They all looked so young, just-got-out-of-high-school young” (McCarthy, 2007, p. 18). This time, the humor stays within the realm of superiority, where McCarthy cannot fathom that she was so much more with it than the healthcare professionals. This is a strategy to dress down healthcare providers, to perhaps remove the aura of all-knowingness that McCarthy had originally thought they carried, and clearly she believes the audience has too. The later example does this on an additional level, namely that McCarthy questions the ability of the healthcare professionals due to their age.

This type of name-calling humor is prevalent throughout *Louder than Words* and is in the beginning of *Mother Warriors*, when McCarthy is retelling her tale. In her mediated appearances, the vitriol is dialed back a bit in that it is more sanitized and generalized (as opposed to attacks of specific doctors, McCarthy attacks the medical establishment). One final set of examples that really highlight the double strategy of this humor is the names McCarthy uses for her second neurologist, who she is told by others is world class: “Dr. I can fix any brain except my own” (McCarthy J. , 2007, p. 29) and “brain-dead neurologist” (McCarthy J. , 2007, p. 40). Again, the first strategy is that of dressing down the establishment through humor, while the second is elevating herself and therefore reinforcing her ethos. By calling into question her neurologist’s ability to function as a brain doctor, McCarthy is implying that she may be better equipped to understand Evan’s brain.

Constructing the Joan of Arc Myth. McCarthy, as well as others, embody a savior myth—a savior against a corrupted system which is covering up a conspiracy. She even frames herself in these terms saying that her work in autism is her God-given “calling” (Greenfeld K. , 2010). In the savior myth, McCarthy represents the main character in that she has been chosen to save others by God from the *corporate greed* and *governmental conspiracy* to continue to give children autism for a profit. In her books and appearances, McCarthy often describes moments where she talks to God for help: “I prayed to God and said He could take me sooner if He would just make my boy better” (McCarthy J. , 2007, p. 6). In this instance, Evan was having his first seizure and was foaming at the mouth. The audience can cast themselves as McCarthy, seeing themselves asking for help, bartering with God to save their child. While McCarthy continues to ask God for help, her conversations with God change. Instead of immediate requests, her requests turn more long term as Evan’s problems become more established. As the terms of her conversations with God change, so too does the way she casts herself. Originally, McCarthy is at the mercy of others, but she wants to change that and she casts herself in another narrative, that of mother’s intuition, to take control of the situation. As she makes choices against the will of her doctors, she affirms these choices with the language of mother’s intuition, for example: “emotional guidance system...right choice” (McCarthy J. , 2007, p. 48) and “a gut instinct” (McCarthy J. , 2007, p. 49). By culling this narrative of mother’s intuition, McCarthy gives the audience one more potential point of identification.

In her later artifacts, McCarthy’s message has become clearer. Instead of being the savior against an anamorphous greed from pharmaceutical companies, McCarthy gives concrete examples of this greed. In their explanation of the administration of the Hepatitis B vaccine at birth for children, McCarthy and Kartzinel do not mince words when evoking the larger myth of

corporate greed. McCarthy asks why the vaccine is mandatory, to which Kartzinel explains why it should not be finishing with a jab in a parenthetical “the American Academy of Pediatrics mandates that we must vaccinate every child [with the Hepatitis-B vaccine] (much to the glee of the pharmaceutical industry, no doubt)” (2009, p. 280). Kartzinel and McCarthy position these types of specifics as concrete evidence—specifics that include the vaccine schedule being overloaded and MMR vaccines being the most-common cause of autism—allowing McCarthy to complete the savior narrative in a compelling way. Specifically, she gives a specific weapon to the villain and demonstrates the pervasiveness of the villain’s power. Since the villain, pharmaceutical companies endorsed by the federal government, are readily despised due to their high profits and McCarthy demonstrates that they are able to use their weapons on us when we are at our most vulnerable (the first days of life), then the audience easily casts McCarthy as both the savior and a hero in juxtaposition. Therefore, the audience potentially has one more compelling reason to identify with McCarthy, because in this particular script, she is the hero. McCarthy also highlights the high profits in her video introduction to Generation Rescue stating: “Vaccines are a multi-billion dollar industry... There is a huge, huge disincentive to admit this is a problem.” This is offered as a reason to distrust these companies and to trust McCarthy and Generation Rescue—thereby identifying with them and their belief in VCA myth.

In mythic analysis, it is helpful to find the archetypal narrative that holds the belief systems together. Jenny McCarthy has become a central figure in the myth of VCA, becoming a matriarch. She is often championed by supports as a martyr of the movement, someone who has the clout and strength to weather the media firestorm—as will be shown more fully in Chapters 5 and 6.

In doing the above analysis, it became clear that McCarthy is central to this construction of herself. Within her self-created documents, McCarthy casts herself as persecuted, but triumphant. One who stands up in the face of criticism. She takes on the role of *Joan of Arc*. As mentioned above, Joan of Arc, despite being French, is a central figure in American mythology becoming a stand in for female martyrs. In addition to her direct chaining-in of the Joan of Arc myth, she supplements this myth with the complimentary frame of being a mother. This frame bolsters the Joan of Arc myth because Joan is considered the mother of France. In other words, culling Joan of Arc as opposed to Jesus allows McCarthy to also employ a maternal frame as a secondary path of identification for her audience.

Summation

It should be noted that McCarthy is far from the first mother to use an affliction to herself/child as a start of a movement. There is a long history of militant motherhood, where women rely on their ethos as mothers for a chance to speak and connect (Tonn, 1996). However, McCarthy, given her position as celebrity, is able to add different ethos-identification points – building to her self-manufactured savior myth—through the multitude of roles she is already known for, and through the many platforms she has.

Mythic analysis demonstrates that grand storylines grounded in history are shaped by each culture or group that retells them as a way to reflect the values of the telling culture (Rushing & Frenz, 1989). It is no surprise that Joan of Arc's story is used similarly, as traced by Ellen Ecker Dolgin (2008). Viewing McCarthy's self-created artifacts as a retelling of the Joan of Arc myth with McCarthy replacing Joan of Arc, allows this analysis to explore the ways that the tales and attributes McCarthy highlight fit into socio-cultural standards of martyrdom. More explicitly stated, Joan of Arc is a stand in for Jesus when the central character of a present day

story is female. As Warner put it: “Joan of Arc...has redeemed the crimes of the monarchy, as Jesus redeemed the sins of the world: like Jesus, she suffered her passion; like Jesus, she had her Golgotha and her Calvary” (Warner M. , 2013, p. 250). In this modern example, McCarthy redeems the crime of the government through her crusade and she suffers through the criticism she endures. While she does not have her Golgotha, she does have a Calvary in the form of her VCA supports. Perhaps the Golgotha is reserved for Wakefield and is embodied in the form of The Lancet retraction. Or perhaps the story is unfinished and McCarthy’s Golgotha is yet to come. Either way, the embodiment of the Joan of Arc myth elevates McCarthy through a shared understanding of her role in the VCA war—a role where she will be and already is canonized.

Case 2: Magazine Coverage

Narrative Analysis Primary Artifacts

As a multi-artifact exploration, this case aims to trace the lineage of VCA as constructed in popular discourse. All articles that included a mention of autism were analyzed from both *TIME Magazine (TIME)* and *Parenting Magazine*¹⁵ (*Parenting*). These magazines were chosen for both their prominence and their different cultural positions. More specifically, *TIME* has steadily been a top-10 circulation magazine in the United States and has had the largest circulation of all news magazines in the United States for decades (The Association of Magazine Media, 2012). *Parenting* has recently taken the mantle as the highest circulated magazine aimed at new and expecting parents from *Parent Magazine*. However, throughout *Parenting*’s history, it has consistently been either the first or second most circulated parenting magazine and is regularly a top-25 circulated magazine overall in the US (The Association of Magazine Media, 2012).

¹⁵ In 2009, *Parenting* split into two publications, *Parenting: Early Years* and *Parenting: School Years*. For this manuscript, *Parenting: Early Years* was analyzed since *Parenting: Schools Years* yielded no results.

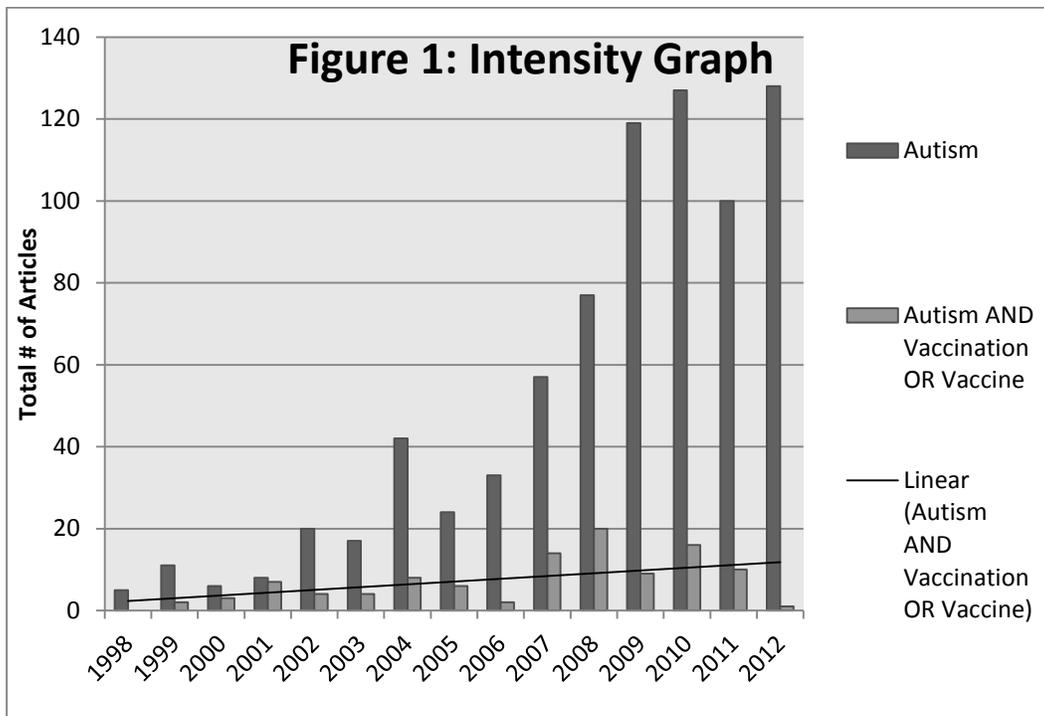
TIME's cultural position is that of the impartial arbitrator of news, while *Parenting* is a viewed as a targeted source of parenting advice. The inclusion of both of these magazines in the analysis allows for the full breadth of the narratives that surround autism and vaccines to be captured, and grounds the analysis in the history of the present.

TIME. The Academic Search Primer database was used to search the entirety of *TIME*'s archives (since 1923) for the word "Autism" and yielded 58 results. The first mention of Autism came in 1969 in a story titled "Trance Children." From the onset, as obvious by this title and as will be explored fully below, the discourse of autism was grounded in the idea that afflicted children were not themselves—that they were in a trance or locked away. The incidence of autism stories in *TIME* did not really increase until early 2000, as only three other stories were published between 1969 and 2000 (1987, 1994, and 1999).

Parenting. The MasterFILE premier database search of the entirety of *Parenting* (*Parenting* began publishing in 1988) for the word "Autism" yielded 11 results prior to the 2009 magazine name change and an additional 10 results after, beginning with the story titled "Breaking the Silence of Autism" from 1997. The next mention of autism came in 2003, when there were three stories, which is when the publication started publishing around two stories a year on autism.

Intensity Graph. A separate analysis of the prominence of VCA was conducted through a thorough search of the Newspaper Source database. The Newspaper Source database was selected due to its breadth, indexing 40 national newspapers and an additional 330 regional newspapers in the United States. This sample provides one of the widest swaths of popular coverage available. The database was searched for annual totals of the three different search

terms between January 1998 and December 2012¹⁶: 1) “autism”, 2) “vaccines” OR “vaccination”, and 3) “autism” AND “vaccines” OR “vaccination.” Figure 1 provides the results of searches 1 and 3.¹⁷ As demonstrated in this chart, the newspaper coverage of autism is correlated with the coverage of autism and vaccines/vaccination in this sample. This illustrates how this myth has become part of the discussion of autism since the publication of the Wakefield et. al. article in 1998. In the next section, I will analyze the emergent narratives from magazine coverage of autism since the 1960s¹⁸



¹⁶ The database was searched for previous years, but 1998 was selected as the start point because 1999 was the first incidence of “autism” AND “vaccines” OR “vaccination” returning results.

¹⁷ Search 2 was excluded from the graph due to both the volume of results (3,369 over the 15 year period) which dwarfs the graph and the irrelevancy of many of these results (most of these articles focus on vaccines that are not at the center of this controversy, such as the continued search for a malaria vaccine).

¹⁸ Magazines were chosen for analysis over newspapers because the articles are generally more robust, having more detailed descriptions and stories than those in newspapers—due to space restrictions, among other things.

Narratives

This analysis uncovers the narratives that span the sample to better illustrate their rhetorical power. As Walter Fisher (1985) posited, humans are story-tellers, and as story-tellers we can be persuaded by a well-crafted story. As shown in Chapter 3, the crafting of the story and its effectiveness depend on the stories' fidelity, probability, and points of identification. In the analysis of this case three primary narratives emerged: a) *the puzzle narrative*, b) *biomedicine renders afflicted helpless narrative*, and c) *the American Dream narrative*. In the next sections, I flesh out these narratives to demonstrate the ways in which they follow familiar paths and are attached to relatable emotions, and therefore are persuasive and lasting—or in Fisher's words, I will demonstrate the “narrative fidelity” of each of these narratives (Fisher, 1985, p. 349).

Puzzle Narrative. In Fisher's narrative paradigm the world is constructed through stories that can be composed of a plethora of components: from the Freytag plot constructions of introduction, rising action, climax, and denouement (Butler, MocarSKI, Emmons, & Smallwood, 2013); to the physical components of settings and characters; to the literary devices that are embedded in the language such as metaphor and simile. The *puzzle narrative* fits into all of these realms and is the most prevalent narrative that emerged from the analysis, in both *TIME* and *Parenting*.

The metaphor of *puzzle* could be swapped with any of a number of synonyms from both *TIME* and *Parenting*, including riddle (Park, 2008), vault (Wallis & Goehner, 2006), or locked case (Wallis & Cray, 2006). The consistent theme throughout the magazine coverage is that autism is a mystery to be solved. This metaphor for autism is carried out on three layers: a) the child afflicted with autism is, him/herself, the mystery, b) the cause of autism is a mystery, and c) the cure for autism is a mystery. The latter two mysteries are sometimes cobbled together, as

the search for the cure becomes a search for the cause, or vice versa. However, I mention them here because of the influence of the myth of vaccines as the cause. With the prevalence of this myth, the cure for autism is twofold. First, fixing the shots to stop new cases and second curing/treating those who have already been afflicted. These forms of the *puzzle narrative* lead to the second narrative, *biomedicine renders afflicted helpless narrative*, and will be analyzed in the next section.

One dominant strand of the *puzzle narrative* comes in the form of personal accounts or experiential narratives. These accounts come from parents (Goehner, 2002; Mithers, 2003), siblings (Greenfield, 2002), and autistic people themselves (Grandin, 2002). In these narratives, the afflicted is cast as a puzzle to be figured out, where one or two pieces could reveal the true person clouded by their disorder. These narratives follow Freytag's triangle with the early warning signs and diagnosis of autism being the introduction, the diagnosis or specific behavioral incident leading the family to the doctor for diagnosis as the catalyst/inciting incident, the trials and tribulations that lead to much familial and personal strife being the rising action, the first major break-through in either behavior from the patient or acceptance from the family being the climax, and the new normal post climax being the denouement. The tellers of these stories share the trials and tribulations of living with someone with the disorder, demonstrating the ways that the disorder takes over not just the afflicted life, but the entire family: "Noah's condition dictated what we ate and when we slept and to a great degree how we lived" (Greenfield, 2002). This fits the *puzzle narrative* because the reorganization of life is a move toward making a piece that does not fit traditional life routines, fit. In other words, in order for a child who does not fit the definition of a *normal* child to act the most *normal* possible, the lives of all those surrounding the child are reorganized. Furthermore, these personal narratives are

wrapped in emotive appeals written to elicit sympathy and empathy, creating a sticky affect for the readers. In other words, these emotions are necessarily linked to the narratives, and therefore stick to the archetypical narrative of the puzzle, tying the narratives together.

Even in the absence of personal narrative, this same structure is evident throughout the coverage of autism. In the first piece ever published on autism in *TIME*, this structure is present and the title, “The Trance Children,” even echoes the mystery or puzzle that these children are. The first line, in a lot of ways, could be the first line of the archetypical narrative of the puzzle and therefore the first line of many of the other autism stories analyzed, even though they were written decades later: “The most tragic, and in some ways most mysterious, form of mental illness in children is infantile autism” (Staff, 1969). This narrative has continued to evolve as the understanding of autism has increased. More specifically, autism has morphed from a rarity and singular disorder to an almost common occurrence that encompasses a spectrum of disorders. This broadening, paradoxically, allows for a pigeonholing of what an autistic child looks like as the clinical options for descriptions are vast but largely indistinguishable to the untrained eye. That being said, there are still clinical-esque descriptions of autism: “Autistic children prefer to relate to objects over people. They’re obsessed with maintaining routines and sameness in their lives. They tend to seek complete aloneness, shutting out the world around them” (Marshall, 2007). These descriptions act as pieces to the puzzle, where they explain some sort of abnormality. With this explanation in hand, parents and caregivers of autistic children can, presumably, rest a little easier knowing others are going through the same trials they are and that it is not their fault. Furthermore, these clinical observations highlight vital settings of the *puzzle narrative*: both the child’s own world that no one else can access, and the doctor’s or specialist’s office.

A slightly different interpretation of the *puzzle narrative* is how these children do not fit in society. The structure of this variant narrative manifests in a stigma that encompasses all parents, not just those with an afflicted child. The original healthcare establishment beliefs about the cause of autism dealt with environment roots, such as unengaged mothers, the so called “refrigerator mothers” (Wallis C. , 2007). This narrative put the blame onto the mother for the child’s disorder and therefore compels mothers, through fear, to make sure their child is the right kind of piece through love and attention, plus constant vigilance of warning signs. Originally, this narrative lead to a desire in mothers with afflicted children to hide the signs of autism because the stigma not only cast its shadow over the child, but also the family. However, that is slowly changing as the prevalence rates rise and services and understandings do too (Wallis C. , 2007). The fear inherent in this variant narrative is obvious. In other words, the desire to have a normal child is rooted in the fear of having an abnormal child, a fear that sticks to the meaning of autism, as will be explored below.

This fear is evident in the crafting of the autism narrative. Many of the articles addressed the fear either implicitly with uplifting stories of how close to normal life can be with autistic children, or explicitly with advice to those worried about their children having autism: “Should Parents Worry? Not excessively. But if you notice speech delays or impaired sociability, promptly make time for a screening” (Staff, 2007). The abnormal/stigma themes are not confined to the *puzzle narrative*: instead these themes undergird every emergent narrative. Furthermore, as will be argued below, both the abnormal/stigma theme and the fear theme are the root of what makes VCA sticky.

Biomedicine renders afflicted helpless. The puzzle to search for the cure and find the cause has turned increasingly scientific as the spectrum grows. The MIND Institute at Stanford

University is devoted to studying autism and one of their current strategies is to build “a database of clinical, behavioral and genetic information on 1,800 autistic kids. One goal is to clearly define autism subtypes. ‘It’s hard to do the genetics if you’re talking about four or five different syndromes,’ says NIMH [National Institute of Mental Health] chief” (Wallis & Cray, 2006). This categorization and need for order is ironic in light of the fact that these are symptoms of autism and also indicative of a disease centered healthcare worldview. While this worldview is slowly being replaced by a more ecological, or patient-oriented, approach to health that accounts for social determinants and a more holistic approach to healthcare, it is still a powerful influence on the healthcare system (Eggly, 2002). The disease-centered approach is commonly known as the biomedical approach and focuses on a disease as independent from the rest of the person—at least in its crudest form (Kertakis, Franks, & Epstein, 2009). Roy Richard Grinkler, an anthropologist from George Washington University who recently wrote a book on autism was quoted by Wallis (2007) as saying: “Thinking about any disorder as an epidemic is easier than thinking about it in terms of multiple causes, shifting definitions and a scientific reality we are only just beginning to understand.” This statement is at the heart of this narrative. Essentially, it is easier to view autism as a single disorder with one cause and therefore one treatment. This worldview allows for hope, because the cure and cause are grounded as something specific and tangible, quarantining autism and its cause(s) outside of the afflicted. Therefore, it is simply a matter of searching and pushing forward. Again, this narrative blends with the aforementioned *puzzle narrative*, as two variants of the *puzzle narrative* place the cure and the cause as the missing pieces of the puzzle. Grinkler is further quoted as saying: “Besides, if a disease suddenly spikes, it seems more plausible that the increase could be reversed—if only we could find the mysterious environmental trigger. With autism, though, that hopeful scenario seems just too

simple” (Wallis C. , 2007). Again, this disease-centered narrative is embedded within this desire to link autism to some mysterious trigger.

The myth of VCA is the perfect exemplar of this disease-centered narrative. As shown above, McCarthy claims that her son was infected with autism by his MMR vaccine and that she was able to cure him through experimental, and innovative, science. These claims are at the center of a 2010 *TIME* article featuring McCarthy and her work with Generation Rescue and Evan. McCarthy, as well as others, embody a crusaders myth—a crusader against a corrupted system which is covering up a conspiracy. She even frames herself in these terms saying that her work in autism is her God-given “calling” (Greenfeld K. , 2010). More importantly for this section, is McCarthy’s total embodiment of the *biomedicine renders afflicted helpless narrative*. This embodiment echoes the work done in the previous case that demonstrated the deployment of the Joan of Arc myth as the foundation of McCarthy’s VCA brand. It is noted in this case as well since McCarthy is a figure written about in the current artifact, and also to demonstrate the ways in which these cases, while separate, are intricately tied together. While the first case of this chapter had myth as its lens, this case has narrative. Myth and narrative are intricately linked, with myth relying less on fidelity but more on cultural prominence. Nevertheless, the myth of Joan of Arc allows for McCarthy to rise up against the *biomedicine renders afflicted helpless narrative*. This ascension is what allows this particular narrative to be more than grim for VCA adherers. While the narratives of this case show autism to be depressing, these depressing narratives open the way for the myths that help the VCA community to cohere to be followed. In other words, McCarthy is rendered vulnerable by the narratives of this case, but

embodies hope since she has overcome this vulnerability through the myths that make up her brand demonstrated in the previous case.¹⁹

In the next section, the narrative of the *American Dream* is explored.

American Dream. As mentioned in the *puzzle narrative* section, autism is often framed as a disorder that restricts the freedom of the family of the afflicted. This restriction makes children “a burden to parents, siblings, and eventually, society” (Greenfeld K. , 2009). This type of restriction is cast as counter to the *American Dream* in the narrative of autism. The *American Dream* finds its roots in the Declaration of Independence, which promises “equality; inalienable rights; life, liberty, and the pursuit of happiness” (Beach, 2007, p. 150). These rights manifest in the ideals of education for all and no discrimination based on race or class. However, the *American Dream* is also based in a capitalist mindset, rooted in *boot-strap* logic, where talent and hard work combine to allow the cream to rise to the top (Porter, 2010). For this manuscript, the *American Dream* is defined as the equal right to opportunities for advancement up the social ladder.²⁰

The narrative of the *American Dream* has two primary variants: a) where the care-giver is cast as the main character and b) where the afflicted is cast as the main character. The former variant casts the afflicted as a supporting character, or nemesis, who stands in the way of achieving the *American Dream*. This casting is not so much of the child him/herself, as it is autism and the trails it brings. Aside from the aforementioned time, monetary, and emotional

¹⁹ McCarthy lends fidelity to the overall narrative of the myth that VCA through her anecdotal and real life example of her son, which is at odds with the empirical studies. However, her prominence and outspoken nature have lead scientists to look at her son’s case more in-depth. One prominent theory that fits her son’s case perfectly, right down to acute onset of seizures followed by autistic-like symptoms, followed by a slow, but persistent recovery, is that McCarthy’s son has a rare disease called “Landau-Kleffner syndrome” (Greenfeld K. , 2010). However, this information is useless in the face of the fixed stare on vaccines. It is worth noting that this counter-narrative of McCarthy’s son also fits the disease-centered health worldview.

²⁰ For sake of brevity and clarity, I am eschewing a further exploration of the *American Dream* and its hegemonic underpinnings that make many of its promises those of false hope.

trials autism brings on, it also dampens social status through the constriction of boasting. In other words, due to the developmental delays and the missing of developmental milestones, many of the narratives center on the despair caused by the absence of public boasting about milestone accomplishments: “I fell into a bottomless pit. When colleagues or acquaintances told me how great their kids were, I’d brag repeatedly about my son [not-autistic] and not mention my daughter [autistic]” (Berger B. , 2005). In this case, the father clearly sees his children’s accomplishments as social currency that aide in social status. The developmental delays associated with autism are wrapped up in missed developmental milestones and therefore perpetuates this type of narrative making and logic. Autism is framed in such ways within these magazines, in both personal accounts, and more clinical descriptions, where warning signs are catalogued via missed milestones: symptoms of autism at 2 to 3 months include not making frequent eye contact; at 6 months they include not smiling, laughing, or cooing; at 8 months the child will not follow the gaze of others; at 12 months the s/he might not respond to her/his name and may not mimic clapping or point; at 18 months he does not pretend during play; and with late onset autism a loss of previous language skills and repetitive behavior may be the cue (Barack, 2006; Staff, 2011). Raising a child is wrapped up in these milestones and reaching these milestones are part of the *American Dream* for children, as they ascend upward toward adulthood. Therefore, when these milestones are missed, the child is thrown off the standard path and the *American Dream* is halted, but not just for them.

The father who could not brag about his daughter later finds a way to reincorporate the *American Dream* into her life. He goes on to describe his new found hope and pride in his daughter: “Julia worked harder than any child her age, sitting for hours at a time doing drills for her therapist. Her persistence amazed me” (Berger B. , 2005). The second variant of the

American Dream narrative is on full display here. The father has overcome his own failures through recasting his daughter as the underdog who relies on the American ethos of hard work to overcome her plight. In other words, this father figured out a way to cast his daughter as the ultimate character in the *American Dream narrative*. Other iterations of this include earlier and more strict recognition of the afflicted in this role: “[I was] worried that the label would be a license to coast—that he’d get used to special treatment” (Cettina, 2012, p. 84). Here a father makes it clear that a leg up, which is counter to the *American Dream*, is the most negative aspect of the stigma associated with the label of autism.

Narrative Summary. These three narratives— a) the *puzzle narrative*, b) *biomedicine renders afflicted helpless narrative*., and c) the *American Dream narrative*—create a petri-dish that allows for the VCA myth to flourish. The main reasons for this are that all three of these narratives have fidelity and therefore are relatable and none of these narratives logically exclude the myth. The pathos of the families of the afflicted is understandable, as these narratives cast the child as lost. Furthermore, the fear induced by the continued rise in prevalence makes the narratives feel more immediate. Furthermore, these narratives all have probability due, in part, to where they are crafted. Since they are printed in major magazines, it is not surprising that the internal aspects of the stories are coherent. These internal, probability, aspects rely on the aforementioned Freytag construction which folds back into the fidelity of the narratives since this is a common narrative construction. In the next section one final narrative is explored: VCA.

Summation: Vaccines Cause Autism

The Wakefield et. al. (1998) article had a profound impact on this myth, and perhaps created it in the mainstream (as evident by the rise in popular coverage of this myth after the publication of Wakefield et. al.’s work—see figure 1). The narrative has fidelity mainly through

two factors, a) autism prevalence rates are and have been skyrocketing and b) vaccines have a long history of mistrust with the public. This mistrust is grounded in how vaccines are made: “Vaccines, of course, aren’t without risk. A slight possibility always exists that those containing live but weakened viruses—oral polio, measles and mumps vaccines, for example—could trigger the disease they’re intended to prevent” (Jaroff, Blackman, McDowell, & Park, 1999). In other words, vaccines contain diseases and this lends credence to the idea that they could cause harm. A more personal example of this narrative at play comes from Nadine Gehr, a mother of an autistic son: “You trust that the government is doing things to protect your child, but the reality is that the benefits no longer outweigh the risks... My child was fine. Then he was vaccinated, and within three to four days he was a different child” (Jaroff, Blackman, McDowell, & Park, 1999). While this may not resonate with everyone, it certainly resonates with some. Furthermore, the mistrust of vaccines has been institutionally supported by the federal government through the 1988 creation of the Vaccine Injury Compensation Program.

The fidelity of this narrative is bolstered when it steps out of the realm of the anonymous and into the spotlight. In other words, there is also a celebrity factor to consider. McCarthy is the exemplar of celebrity autism crusaders. As stated above, she is the figurative and financial head of Generation Rescue. But she is not alone. Former Heisman Trophy winner and NFL quarterback, Doug Flutie, created the Doug Flutie Foundation to aid autism research after one of his sons was diagnosed (Mithers, 2003). And stepping away from this particular myth to a variant of this myth, Republican Congress Women and Presidential Primary Candidate Michelle Bachmann said, from her national platform of the campaign trail during the 2012 primary: “There’s a woman who came up crying to me tonight after the debate. She said her daughter was given that vaccine [HPV]... She told me her daughter suffered mental retardation as a result.

There are very dangerous consequences” (Weiner, 2011). The adverse effects of vaccines are perpetuated at a very public and national level, and therefore undergird the fidelity of the analyzed narratives within this case. Even without celebrity and the pathogens within vaccines, the process of vaccination itself lends credence to, at least, the fear behind these myths: “Any rite of passage that involves jabbing needles into small children is bound to worry more than a few parents” (Gorman, 2002).

In summation, these narratives work together to create the right environment for the VCA myth. The primary autism narratives cast parents and caregivers of afflicted children as people who have been robbed of their real children rendering their children as puzzles. This casting strips away the *American Dream* and propels the parents forward on a quest to find the cure or cause of this puzzle/lost dream. The VCA myth blossoms in this framing, as it is an easy answer with fidelity in its own narrative, and therefore can act as a complimentary narrative, or destination/climax in these surrounding narratives. In the next chapter, the meso-level of analysis will be explored through the history of diagnostic criteria, followed by an examination of the circulation and recirculation of foundational scientific articles in the anti-vaccine movement. Chapter 6 will zoom out to the macro level and explore the brands of Generation Rescue and Autism Speaks, before turning to the analysis of Congressional hearings and court-cases on VCA.

CHAPTER 5: MESO-LEVEL—MEDICAL REALM ANALYSIS

Autism was first defined in 1943 by Leo Kanner and, separately, Hans Asperger defined Asperger's in 1944 (Gupta, 2004). At the time, both researchers situated these disorders within the realm of schizophrenia, where they remained until the 1970s. In this section, the foundational diagnostic articles on autism and the sections on autism from each of the five iterations (plus three revisions) of the Diagnostic and Statistical Manual of Mental Disorders (DSM) are analyzed to provide a history of the social construction of autism within medicine. After tracing the intricacies of the history of diagnosis in the first case, the second case of this chapter examines the ten most cited peer-reviewed, empirical articles that link the onset of autism to the measles, mumps, and rubella (MMR) vaccine. The articles are rhetorically examined for how the contents of these articles are used as proof across its recirculation in both leading anti-vaccine organizations and their counter organizations.

Case 1: Diagnostic History

As Michel Foucault (1965) demonstrated in *Madness and Civilization: The Birth of the Clinic*, the way disorders are classified dictate the way they are diagnosed and treated. This reveals how medicine is socially constructed and, therefore, when tracing the diagnosis of a disorder the history reads as a type of journey. Autism is no different. Autism, while not officially diagnosable through the DSM until 1980, had been around prior to this official diagnosis and had been around prior to the foundational articles that led to the diagnostic criteria. Sula Wolff (2004) and Vidya Gupta (2004) each provide a detailed history of how autism came to be an official diagnosis. However, the case presented below is not an attempt to replicate these

works. Instead, the case looks to the articles and books that make up this history and uncovers common themes that seem to have established fertile ground for the *vaccines cause autism* (VCA) myth. In my analysis below, the journey of the disorder manifests into a kind of push and pull of causation. In other words, while the documents analyzed for this section are the basis for diagnosing someone with autism; within these documents the question of cause almost always bubbles up. This percolation starts with the first diagnostic article, Kanner's 1943 case studies. This pull toward causation clearly grounds these articles in the biomedical model, as, from the onset, the goal of all of these articles is to explain the "how" instead of just detailing the "what," as they outwardly claim to do.

A Brief History: Defining Autism

It is important to establish how the disorder morphed from one that was rarely seen to one that is now diagnosed in 1 in 68 children (Autism and Developmental Disabilities Monitoring Network Surveillance Year 2010 Principal Investigators, 2014). The rise in autism spectrum disorder (ASD) diagnosis is not all that surprising when looking at how the diagnostic criteria have evolved in the last seven decades. First, Kanner's initial foray into establishing autism as a unique disorder had to navigate the invention of a new disorder. After reporting on the eleven cases in his article, Kanner offers them as a constellation of a "unique syndrome" (1943, p. 242). Even at the time, Kanner is able to predict, and articulate, that there will be a rise in cases with the clear category he is creating:

"which seems to be rare enough, *yet* is probably *more* frequent than is indicated by the paucity of observed cases. It is quite possible that some such children have been viewed as feebleminded or schizophrenic. In fact, several children in our group were introduced

to us as idiots or imbeciles, one still resides in a state school for the feeble-minded, and two had previously been considered as schizophrenic” (emphasis added, p. 218).

Kanner sets autistic children apart from schizophrenic adults and children through the onset of the loner quality most autistic children possess. Specifically, he notes that schizophrenics develop this quality after having displayed normal human connections, while autistic children have this quality, seemingly, from birth. However, the condition persists within the classification of schizophrenia for decades, perhaps because both Kanner and Asperger (1944) use the term autism in their description of the disorder—with the term meaning “living in self” and originally coined by “Swiss psychiatrist, Eugen Bleuler, in 1911, to describe self-absorption due to poor social relatedness in schizophrenia” (Gupta, 2004, p. 1). Kanner also notes that many of the children in his case studies are highly intelligent—often able to recite long lists such as names, places, poems, etc.

Even though Kanner tries to differentiate autism from schizophrenia, and therefore the institutionalization and stigma of the latter, he still situates the disorder as a psychosis—a belief that persisted well into the 1970s (Wolff, 2004). This grounding stigmatizes autism in the lay world, as psychosis is associated with highly disruptive disorders that are potentially dangerous, and the stigma of psychosis is generally more harmful in adolescence; when ASD is diagnosed (Yang, Wonpat-Borja, Opler, & Corcoran, 2010). In other words, when a syndrome is part of the psychosis cluster it definitionally renders the diagnosed psychotic. Psychotic episodes are divorced from reality, putting the afflicted into a fantasy world. These episodes remove rational thought from the afflicted and therefore the afflicted can enact behaviors well outside of the socially accepted range—including violence in extreme cases. These episodes generally produce stigma in the public because of the association with violence (Ben-Zeev, Young, & Corrigan,

2010). This stigma is solidified through the repeated use of psychotic characters in crime serials on television and in horror movies (Cuklanz, 2000). Given the dream-like trance that is associated with autism, the fact that it is still loosely tied to psychosis in the lay world is not surprising, but this tie clearly adds to the stigma of ASD. Furthermore, this type of linkage, even though it was somewhat erased institutionally with the publication of the DSM-III, is still a pressing debate within the medical community.

One of the main debates surrounding the publication of the DSM-V in 2013 was the proposed new category of “psychosis risk syndrome” (Ben-Zeev, Young, & Corrigan, 2010, p. 323). This category, which was not included within the final printing of the DSM-V, was proposed as a way to mark patients as at risk for psychosis: “the goal of these early diagnoses is to facilitate early detection of the warning signs of what may go on to develop into a severe pathology” (Ben-Zeev, Young, & Corrigan, 2010, p. 323). The diagnosis would have included ASD because “the new category reflects recent advances in the field of autism and neurodevelopmental disorders showing that the symptoms of these disorders represent a continuum from mild to severe” (Ben-Zeev, Young, & Corrigan, 2010, p. 324). While this debated diagnosis was not included in the final version of the DSM-V because of the stigma that it would have produced and the evidence that it would have only correctly identified 30% of future psychotics, the diagnosis is still being studied for future iterations of the DSM with a group of loyal backers (Maxmen, 2012). As the history below will outline, dissociating ASD from psychosis has been a long process, and this new proposed diagnosis rekindles this connection and the stigma it incubates.

The first DSM was published in 1952 and did not list autism as an official diagnosis. The DSM is published by the American Psychological Association (APA) and is meant to be the

bible of diagnosis. In other words, the DSM is the official guide for how to diagnose any mental health problem currently *known* to humankind. In order to place a disorder within the manual it must be established within the scientific community, with statistical support from multiple studies that show consistency across cases and time. Despite being published for the first time years after Kanner's original autism article, the DSM did not offer an official diagnosis for autism until its third full printing in 1980. It did, however, mention autism or autistic symptoms in four places in the DSM-I.

The first mention of autism is in the definition of terms, when the manual is setting the rules for what a “Psychotic Disorder” must and may have to be considered psychotic (The Committee on Nomenclature and Statistics of the American Psychiatric Association, 1952, p. 12). In this placement, the word autism is used to bolster the definition of “withdrawal from reality” and not in the way that we define the word today. It is later used in the same fashion to characterize what a “Schizophrenic reaction, paranoid type” (p. 24) looks like. Specifically, that Schizophrenia involves detachment along with “unrealistic thinking...delusions of persecution, and/or of grandeur” (p. 24). The most relevant of the four references to autism for this project is in the definition of “Schizophrenic reaction, childhood type” (p. 28). In this disorder, the DSM says that autism is the primary manifestation of schizophrenia in children before puberty. While Kanner initially, and continuously, tried to wrench autism from the schizophrenia subtype, it took decades for his work to pay off. Therefore, this type of official linking between these realms is one reason the discourse of autism to this day remains thought of as a psychosis. In the world of psychosis, disorders are medicated and grounded in external triggers—even if there are internal/genetic predispositions (Hunter & Storat, 1994). Thus, this linkage is problematic and part and parcel to the stigma within the ASD discourse, as discussed above.

The DSM-II (1968) like the first does not classify autism as its own disorder. Instead, autism is again used as a definitional term for schizophrenia in adults and children. One wrinkle added to these definitions in this iteration is that “Autistic thinking” is linked to “daydreaming and the inability to express hostility and ordinary aggressive feelings” (p. 42). In some ways, this addition is in-line with the original manual, since autism is part of the childhood phenotype of schizophrenia and childhood is often thought of as innocent. Conversely, the detachment this description paints, along with a sort of weakness since the non-aggression is characterized as abnormal, is a shift away from the violence that underscores much of the schizophrenic discourse. The foundation for the themes of gentleness and dreamer and trapped in ones’ own mind that were revealed in Chapter 4 are evident even within this small snippet of text.

The DSM-II was revised to exclude homosexuality in 1973, but a major rewrite was not published until 1980 with the DSM-III. This third addition was the first to actually establish autism as a disorder under the category of “Psychoses with origin specific to childhood” (p. 422) and, more specifically, Adjustment Disorder. In the short description of the syndrome the onset is set between birth and 30 months, and the hallmarks of autism are clearly delineated: speech delay with reversal of pronouns, impaired social functioning with little or no eye contact or cooperative play, ritualistic behavior, and high rote memory skills. The syndrome is also explicitly separated from “schizophrenic syndrome of childhood” (p. 423). In the robust description of autism, this separation was framed as a debate: “Some believe that Infantile Autism is the earliest form of Schizophrenia, whereas others believe that they are two distinct conditions” (p. 87). The section ends the debate by citing a lack of correlation between families of children with autism and an increase in Schizophrenia: “which supports the hypothesis that the two disorders are unrelated” (p. 87). As will be discussed below with the way parental blame is

debated, this type of acknowledgment of a scientific debate creates threads of support for not only the side that the institution backs, but also the other side. It is important to note that this type of debate framing is typical of the scientific enterprise and is a valuable tool for scientists as they search for context and meaning. However, from a rhetorical perspective, one that aims at understand how discourses are created and perpetuated, this type of framing is problematic. Specifically, since the DSM is the primary source of institutionalization for disorders, the DSM creates institutional support for both sides of these debates by publishing the debate itself. In Phillip's reading of Foucault, he contends that:

“Discourse formations, however, are not understood as wholly coherent entities; rather, they are riddled with incoherence and contingency...discourse formations work to hide the existence of incoherence and contingency. Foucault (1972) calls these points of incoherence contradictions... Contradictions, thus, prevent discourse from becoming entirely self-contained” (2002, p. 333)

This contention is a perfect descriptor for how the discursive formation of the scientific enterprise works, which is demonstrated by the example presented here. Specifically, debate is a central tenet of the scientific enterprise, therefore, publishing debate adheres to said formation. The institutional version of the discourse of autism in 1980 had moved beyond labeling autism as Schizophrenic, but bound by a superseding discourse still published the debate, creating a incoherence contradiction that fosters counter discourses. Therefore, when the discourses are moved to less institutional realms, like popular culture or folk understandings, agents within these realms are bolstered by the institution of medicine, via the DSM, no matter which side of the debate they fall.

The DSM-III-R was released in 1987 and had three explicitly commissioned field trials as the reason for the rewrite, one of which was on “Pervasive Developmental Disorders” (p. xxi) which includes autism. In this rewrite, autism bubbled up to become the central disorder for the category in which it resides:

“This classification recognizes only one subgroup of the general category Pervasive Developmental Disorders: Autistic Disorder, also known as Infantile Autism and Kanner’s Syndrome. The evidence suggests, however, that this disorder is merely the most severe and prototypical form of the general category” (p. 34).

The commission of the field trial alone grants ASD a place of prominence within the field, a space that was garnered by the rise in incidence. Furthermore, by making it the central disorder, autism had finally, after 44 years, been granted the status as a fully-fledged disorder. And with that, the incidence exploded. While the prevalence of autism doubled in the DSM-III-R from 2-5 in 10,000 in the DSM-III to 4 to 5 out of 10,000 in the revision, the following iterations of the DSM and support documents sees the incidence rise to 1 in 68(Autism and Developmental Disabilities Monitoring Network Surveillance Year 2010 Principal Investigators, 2014).

By the fourth DSM, the Pervasive Developmental Disorders cluster has expanded to include five different diagnoses, two of which are now part of ASD (Autism and Asperger’s). This iteration fleshed out an exhaustive taxonomy that included social, language, and behavioral characteristics of the disorder. The hints toward causation and familial coldness that are prevalent in the DSM-III and DSM-III-R, and will be explored in the next section, are absent in the DSM-IV, DSM-IV-TR, and the DSM-V. These manuals, published in 1994, 2000, and 2013 respectively, each spend their pages cataloguing the different behaviors. It is important to note

the size differential in the autism sections across these manuals. What started as zero pages grew to 2 and 4 and finally 18. While this growth is to be expected given the rise in incidence, it still carries rhetorical weight. Autism is now a chunk of the DSM and therefore is institutionally weighted as powerful. In the next section the role of causation within these diagnostic manuals is analyzed.

Causation: The Role of Parents

Causation is the central theme of these diagnostic manuals and articles. An implication of causation being a central theme includes more support of the pervasiveness of the biomedical model of medicine. The reviewed articles and books are meant to help clinicians and researchers identify disorders and to treat them, not to assist in the sourcing of a disorder, which generally is engaged in through other venues. Therefore, the inclusion of theories of causation is out of place. Perhaps the prevalence of causation exploration is so high in ASD because the original Kanner article also posits cause, if only briefly.

In his explorations of reasons or causes of autism, Kanner notes that his case study patients did not enjoy or seek out being touched, and that this type of behavior was a standard throughout their developments (1943). In fact, he notes, that most children start to adjust their posture when being picked up, in order to help those lifting them, at four months, but not these children, who did not learn this behavior until year two or three: “This universal experience is supplied by the frequency with which an infant is picked up by his mother or other persons” (p. 242). Here Kanner implies that the children display this type of maladaptive behavior because they never had the opportunity to learn the socially appropriate behavior—namely, how to be picked up warmly. This line of reasoning becomes a central point of exploration for Kanner, and as will be discussed below, plagues autism theories of causation to this day.

Kanner's observation of poor social adaptation leads his observational eye toward the parents. But more than just blaming parents for not picking the children up enough, which he does not have proof of, Kanner more fully investigates mannerisms of the parents to posit that they are to blame for this disorder in their children:

“One other fact stands out prominently. In the whole group, there are very few really warmhearted fathers and mothers. For the most part, the parents, grandparents, and collaterals are persons strongly preoccupied with abstractions of a scientific, literacy, or artistic nature, and limited in genuine interest in people. Even some of the happiest marriages are rather cold and formal affairs” (p. 250).

Interestingly enough, this description is immediately written-off by Kanner and he posits that the disorder is a birth defect. Nevertheless the damage was done and the implication that educated parents are cold parents, and cold parents are more likely to have autistic children, became a central exploratory line in both causation research and future diagnostic articles. Furthermore, autism became a disorder of the wealthy because of this line of reasoning, as educated parents are more likely to be wealthy than uneducated parents and wealthy parents are more likely to have access to healthcare facilities and therefore diagnosis (King & Bearman, 2011).

While today ASD is diagnosed across the socioeconomic (SES) spectrum, it was once relegated mainly to high-SES families (King & Bearman, 2011). This disparity, we now know, is and was partially due to access to diagnosis (King & Bearman, 2011). In other words, higher SES families have access to better health care and are more likely to go to the doctor for slight, non-life threatening, abnormalities. However, it seems like Kanner's initial foray into causation and cold parents must also play a role, at least rhetorically. Furthermore, since the spectrum

began with the top of the IQ scale, despite several "imbeciles" in the original 11 cases, this point of causation was reinforced. Kanner posits that since the children were all gifted in the memorization of lists (names, places, poems, etc.) but could not use language to adequately communicate (for their age) that parents would "stuff them with more and more verses, zoologic and botanic names," (p. 243) etc. His implication is that this information-stuffing may have contributed to their disorder and he goes further to pin this on the families: "There is one other very interesting common denominator in the backgrounds of these children. *They all come of highly intelligent families*" (emphasis in original, p. 248).

This belief, that causation is somehow tied to cold parents, has been officially dispelled (Task Force on Nomenclature and Statistics of the American Psychiatric Association, 1980). However, as was shown in Chapter 4, it still comes out today in the mainstream media, even if fleetingly or for context. While Kanner himself decried the inaccuracy of this belief in 1979 and the DSM-III also refuted it, it persists. When describing the predisposing factors, the DSM-III brings up the hypothesis of cold or detached parents: "In the past, certain familial interpersonal factors were thought to predispose to the development of this syndrome, but recent studies do not support this view" (Task Force on Nomenclature and Statistics of the American Psychiatric Association, 1980). While the text explicitly dispels this hypothesis, the fact that it was brought up actually lends credence to it. Specifically, this is the first diagnostic guide for autism, by mentioning parental style/mood as a predisposing factor, even to deny that belief, the DSM-III officially sanctions this line of thought within the medical community. This line of thinking is furthered in the DSM-III-R: "In the past, certain abnormalities of parental personality and child-rearing practices were thought to predispose to the development of Autistic Disorder, but controlled studies have not confirmed this view" (1987, p. 37). The language in the revision is

actually a bit more troubling, moving away from a negative endorsement of this view to a lack of positive endorsement. While the DSM-IV, DSM-IV-TR, and DSM-V abstain from this specific line of inquiry, the DSM-V rekindles parental blame, although from a different angle.

The DSM-V is three versions of the DSM series removed from the last mention of parental blame, however it rekindles this line of causation and, in turn, underscores the dangers of the official printing of refuted theories. Specifically, the DSM-V, under the *Risk and Prognostic Factors: Environmental*, states: “A variety of nonspecific risk factors, such as advanced parental age, low birth weight, or fetal exposure to valproate, may contribute to risk of autism spectrum disorders” (American Psychiatric Association, 2013). While fetal weight can have links to parental choices (e.g. smoking while pregnant), it is the most innocuous of this list in terms of parental blame. The other two mentioned factors are clearly rooted in this old model of causation linked to parental choices or behaviors. First, advanced age is clearly something that parents have some sort of control over, as is exposure to valproate, which is an anti-psychosis drug used to treat everything from migraines to bipolar disorder to epilepsy to anorexia nervosa. In other words, the DSM-V has introduced plausible paths to blame parents for the affliction their children suffer from, both of which can be linked back toward *selfish* choices. If parents *choose* to have children older or *choose* to have children despite a preexisting condition that requires valproate, then they are more likely to have an autistic child. This type of framing, while necessary, continues the discourse of autism as an “us” (parents) versus “them” (medical establishment) and therefore makes the discourse ripe for the type of mythmaking at the heart of this project.

In other words, this exploration of the role that causation played in the foundational diagnostic manuals for autism should give pause to any vitriol aimed at VCA subscribers. This

group, like the establishment before it, is trying to make sense of a multifaceted disorder and has clung to threads of empirical work, since discredited, but empirical and officially sanctioned nonetheless. Furthermore, the moorings of the autism vessel are anchored in causation via the environment and the establishment continues to produce a wake to perpetuate these waves when causation is centrally grounded in diagnostic work.

Summation

One consistent theme throughout the diagnostic history of autism is the continued culling of the loner quality. Like the prison or cell metaphor exposed in Chapter 4 via mediated coverage of autism, the loner motif is framed as an unsavory characterization. Since children are generally thought to be innocents and warm, this quality shared by autistic children marks them unfit to be children. While using this theme to diagnose ASD may be unavoidable since it is a core feature, the employment of this theme still threads its way through the discourse of autism. This thread, woven together with the threads of typical childhood, stands out as a single orange thread woven into a blue sweater. In other words, the loner quality may be what induces fear in afflicted families, as they are forced to raise a child without the promised warmth of the discourse of childhood.

The clear theme of this section has been causation. Coupling the sharp focus on causation with the loner theme and the fear it induces provides a window into why autism is ripe for myth making. In other words, the establishment's focus on causation implores other constituents to look for a cause. When the establishment provides causes it later takes back, the take back is too late. These causes are now real for constituents. As realities, no amount of push back from the biomedically-grounded establishment will do any good, as explored in the next section.

Case 2: Dirty Sixteen

The second case study of this chapter traces the use of the empirically reviewed articles that make, or appear to make, a claim that vaccines, or some other environmental trigger, cause autism. In the conceptualization of this project there were believed to be sixteen such articles, the dirty sixteen, but more articles have since been grouped with these original sixteen. At the time of this writing there are 72 such articles. Not all of these articles, which are led by the Wakefield et. al. study, actually make solid claims, or claims at all, that environmental triggers cause autism. However, what they all have in common is that they have at least been interpreted to make this claim. In other words, some of the articles, such as Wakefield's work, make a direct claim that environmental triggers cause autism. Conversely, some of these articles make no such claim, even refuting such a claim explicitly, but are used by the anti-vaccine movement as proof nonetheless.

In this section, the circulation and recirculation of these articles is examined to better understand how evidence from these articles is used by both anti-vaccine groups and pro-vaccine groups. Given the amount of articles, 72, and citations of these articles in academic texts, collectively 8,900 (ranging from 0 to 1811, with an average of 123 citations), the artifacts of this case are constructed from the top ten most cited articles (these 10 articles account for 5,428 citations, ranging from 201 to 1811; see Table 1 for a full list of the 72 articles and the number of citations of each). Furthermore, instead of looking at how these articles are cited and debated within the academic publishing world, I turn to the most trafficked anti-vaccine groups on the web that cite these articles and analyze how these groups utilize these texts. These sites are The Liberty Beacon and Vaccine Facts—and pages to which they link. The pro-vaccine side is represented by the medical establishment, where the recirculation of these articles are

represented in Table 1's citation numbers. While these are not being analyzed due to the scope, this project uses the peer-review process and the history of Wakefield's article outlined in Chapter 1 to serve as the comparison to the anti-vaccine movement. That being said, the pro-vaccine organizations Immunize USA and Jenny McCarthy Body Count were searched as part of this case, as well. However, the results show that these organizations do not deploy these articles, except for the Wakefield et. al. article. Therefore, in the analysis below these organizations are described in a more macro-level way and in regard to their coverage of the Wakefield et. al. article.

Circulation theory allows us to discard the systematic approaches to rhetoric that can sometimes be too stiff to deal with the post-structuralist configuration of today's rhetorical situations. In other words, circulation theory is born from the critical rhetorical turn and challenges the critic to abandon traditional notions of rhetoric (Stuckey, 2012). One result of this shift is the way the rhetorical situation is redefined; through a circulation lens we must:

“conceptualizing them [rhetorical situations] in terms of a milieu of dispersed transhistorical and transsituational moments. This ontological shift takes us from the rhetorical situation as a temporally and spatially fixed site of exigency, constraints, and discourse to rhetorical circulation as a fluidity of everyday practices, affects, and uncertainties” (Chaput, 2010, p. 6).

In this conceptualization rhetoric is not bound by intent or reception—instead rhetoric shifts to the domain of the hegemonic. Specifically, rhetoric becomes everything that challenges or reinforces discursive formations. With this in mind, the rhetoric of this case does have intent, but what makes circulation theory an apt lens here is that the groups at the center of this case have

become the critical rhetorician—in a way. In other words, these groups are creating new artifacts from transsituational and transsource texts to bind their causes and, in turn, their organizations to VCA. We can then conceptualize these groups as creating publics, with publics being sites of address (Warner, 2005). More specifically stated, circulation “enabl[es] a composition to address an audience of strangers, whom, by devoting attention to it, becomes its public” (Olson, 2009, p. 6). In this case, the circulation of the dirty sixteen by VCA organizations is examined to understand how this circulation builds a public.

The differences between these two opposing views and how they use these articles is stark: beginning with the fact that the anti-vaccine movement employs these articles with much more frequency than the non-establishment pro-vaccine groups. This frequency may be linked back to the idea that to build a public from scratch, an audience must be summoned (Warner, 2005). Instead of countering these articles head-on, the pro-vaccine side uses the tactic of ignoring these articles and instead focuses on the positive science surrounding vaccines. This difference in strategy comes through in how information is presented as well. While both sides frame their sites as arguments, the pro-vaccine side has a much more focused approach with less clutter on the pages themselves, and far fewer links. Where the anti-vaccine side overwhelms the reader with links and pages—a seemingly endless amount of support for their side is presented as their public face. There is a confidence projected in the former and a bit of a franticness in the latter—although I will admit that this reading is informed by my own opinions on this topic and is not necessarily core to the ways in which the sides frame their evidence.

A Brief Anti-Vaccination History

The anti-vaccine movement has a long history, dating back to the nineteenth century, shortly following the first vaccination acts passed in the United Kingdom (Wolfe & Sharp,

2002). These first movements rallied around a push against the UK's 1853 act which made smallpox vaccines required by law for all infants before they turned three months of age. The resistance was violent with "riots in Ipswich, Henley, Mitford, and several other towns" (Wolfe & Sharp, 2002, p. 430). The violence gave way to more peaceful social organizations and movements, whose rhetorical tactics are similar to those still used today by their modern counterparts. Namely, the core argument against required vaccination was an appeal against government intrusion and toward social liberty, which is a line of argument directly used today and will be explored more fully below. The groups in the nineteenth and twentieth centuries wrote books, pamphlets, petitions, and journals—they held rallies, protests, and organized meetings—in short, they formed a unified community, all rallying around a common enemy: vaccinations as a stand in for big government (Wolfe & Sharp, 2002).

Today, these groups are largely based online and are disparaged by the establishment as part of the reason that vaccine adherence is in a steady downward spiral (Krans, 2003). Even with the migration online, the rhetorical strategies of these groups are similar to their historical brethren. And while they may not metaphorically turn their common enemy into a monster²¹, these organizations do use the institutional unity around the need for vaccines as a common enemy and rallying point. The groups chosen for this section are the most circulated websites devoted to anti-vaccines on the web²². All of these groups can be categorized as community run.

²¹ "The Vaccination Monster" was the common enemy created, and drawn, in the early movements: "This monster has been named vaccination; and his progressive havoc among the human race, has been dreadful and most alarming" (Wolfe & Sharp, 2002).

²² It should be noted that there is a parallel movement to make vaccines green. This movement is where Jenny McCarthy's Generation Rescue currently resides. Oftentimes these groups get lumped together with the strict anti-vaccine groups, which is in part due to the slippery nature of their missions, which, in the case of Generation Rescue, evolved as publicity and push back mounted.

Deployment of Proof

The differences between the way that the medical establishments deals with proof and the anti-vaccine and VCA subscribers does is stark. The establishment, which is responsible for the original publication of the articles at the center of this case, allows the process of acceptance and/or rejection of the articles' premises, findings, and/or conclusion to be sorted out publicly and over a long period of time. This happens via the academic, peer-reviewed publication process, where these articles are cited and debated, and largely debunked (or interpreted differently than the VCA subscribers' interpretation).

The anti-vaccine side uses these articles as pieces of dogma, or, less forcibly stated, as evidence for their points. They are generally posted with non-ambiguous headlines that proclaim the contents of the articles as definitive. Accompanying these headlines are short teasers of the articles that, again, leave no room for counter evidence. The links are often to secondary sources, where a journalist has tried to summarize the findings. These summarizations are oftentimes much more nuanced than presented by the anti-vaccine groups. A good example of this type of deployment comes from The Liberty Beacon. The Liberty Beacon bills itself as a counter movement to all things against liberty, which they claim include "the MainStream Media" (Landry). The site, or network of sites, uses a silhouette of a patriot riding a horse and holding a lamp, presumably Paul Revere, as its logo. As is evident from its logo and name, the organization is strongly aligned with Tea Party values of less government and more liberty, which includes the idea that vaccines are part of the overreach of government and echoes the anti-vaccination movements of the 1800s. All ten of the empirical articles analyzed for this case are found on multiple pages of The Liberty Beacon, and they all are on one single post titled "Fourteen Studies: Our Studies (Vaccine Studies the Govt. Wont [sic] show you)" (Staff, 2013).

The title of this post encompasses the type of framing these sites employ in an effort to end debate. Here, these controversial articles are presented as hidden from the public by the government in an effort to keep vaccines around—an effort to keep money going to both the government and pharmaceutical companies. The article starts plainly enough: “You never hear about the science that has been published that helps support a connection between vaccines and autism and other disorders, and yet the list grows every day” (Staff, 2013). This frank talk is a way to deploy these articles without bringing up the controversy that follows them, and also as a way to discredit the medical establishment. This doubting is disingenuous because it implies that these articles have been suppressed in some way by the government in some sort of conspiracy, despite the fact that they are published in journals and, mainly, freely available through pubmed, which is a government website devoted to making science funded by the government freely and easily available to everyone. Furthermore, this tactic is part of the way that circulation works, as the frank talk implies a like-minded audience who is already part of the community. Therefore, the articles are written as rallying points that cull their public, versus pieces of persuasion for outsiders.

Another telling difference between these groups and the establishment is the way that these anti-vaccine groups use lists and also archive these articles. These empirical articles are published in pages of proof, where they are linked with dozens of other articles. The non-digital representation of this type of webpage would be someone dropping reams of paper in front of their detractors and pointing to the physical weight as proof and evidence to the fact that the debate is over. In the current example, these studies are each described in short paragraphs with no room for debate. For example, the Vargas et. al. (2005) study, which is the second most cited study in academic journals of this sample at 809, is described succinctly:

“The brains of children with neurological disorders are experiencing severe oxidative stress and inflammation, suggesting an environmental cause. We cite four published studies that support this position... This study [Vargas et. al. (2005)], performed independently and using a different methodology than Dr. Herbert (see above) reached the same conclusion: the brains of autistic children are suffering from inflammation” (Staff, 2013).

This description is not as inflammatory as the title of the page or the preamble, cited above, but it continues the quashing of any debate and continues to manufacture the public. The matter-of-fact tone and light jargon of the description project an authoritative tone that is an ethos establishing move. Specifically, the jargon serves as a tool of ethos, as does the mention of how many cited studies relate to this one piece, of a mountain of, presented evidence.

This particular example is more troubling than most, since the Vargas et. al. article does not actually support a view of autism being triggered environmentally. Instead, the article was an exploration of the brains of autistic patients who had died in accidents. The purpose of the study was to give new insight into brain differences between those with autism and the general public, with the major finding being that autistic brains have more inflammation. The findings show inflammation, but never is an environmental link even mentioned in the article. The authors were so worried that publishing their study would lead to its misuse by not only the anti-vaccine group, but also by those seeking invasive treatments to reverse autism, that they published a lay introduction directly undercutting these paths as viable via their article and emphasized the dangers of these paths with capitol letter warnings (Tsouderos & Callahan, 2009). The characterization cited above is clearly at odds with the intent of the authors, but to understand

this the lay reader would have to do their own research—as The Liberty Beacon does not link to the original article or its preface.

The Liberty Beacon often uses titles that are inflammatory to their opposition due to their cut-and-dry nature. This post was titled “Fourteen Studies: Our Studies (Vaccine Studies the Govt. Wont [sic] show you)” (Staff, 2013), and will be explored more fully in the next section. But it is evident from a first reading that the title is declarative. Another good example of this tactic is the post “40 Infallible Reasons Why You Should Not Vaccinate Infants” (Staff T. , 2013). This title states that the reasons within are perfect, and the article itself follows in this bravado-laden style: “There is no scientific study to determine whether vaccines have really prevented diseases.” The post goes on to explain that every epidemic that a vaccine has claimed victory over had been in a downward spiral when the vaccine was released and therefore the vaccines are not the culprits of the decline. The remainder of the post outlines the conspiracy with the government and drug-company lobbyists at the center and continues to make its claims in matter of fact language with no room for ambiguity. All counter-points are addressed through straw-man tactics, easy dismissed via an elaborate conspiracy, fear, or scientific proof from the articles at the center of this case.

In another example of proof-making that uses matter-of-fact tactics, the site Vaccine Facts uses the Hertz-Piccotto and Delwiche study as a point of evidence for the link between “Vaccine Injury” and autism. This article is deployed in a long list, after the meat of the post which will be discussed below, as a one-of-many (30 total) pieces of evidence/support it should be noted that the article is unadulterated unlike the above example of Vargas et. al., instead a link is provided to the pubmed entry and the abstract is left untouched. This is curious considering that the abstract of this article, and many others cited, does not support the premise of the post’s

argument that precedes it. Instead the abstract is jargon heavy and describes the cytokine levels of children with and without ASD in their sample. In the main article the jargon is also very heavy but it is broken down to a simple cause and effect with emphasis added via bolding. The title of the post, “The Mechanisms of Vaccine Injury and Via Cytokine Storm,” is headed by a four color diagram that shows the brain is protected by “Innate immunity,” depicted by a semi-circular wall, which is under attack from viruses, bacteria, and toxins. While the wall of immunities holds, the “Cytokines” are within the wall and circle the brain and penetrate, shown via arrows (Vaccine Facts). The picture serves to illustrate the intent of the post and cut through the jargon of both the title and the body. With this picture serving as a clarifying force, the jargon of the article serves as an ethos boosting force—just as the listed abstracts from the medical articles at the close of the article do. The body of the article describes how vaccines work to build immunity and also how this process puts the body at risk of injury: “There is no question that chronic levels of unnatural brain inflammation[as caused by a vaccination] have been and continue to be found in autism...studies tie it directly to the aluminum adjuvant effect of vaccines” (Vaccine Facts). These sites are populated with the articles of this sample being used as a citation and therefore an ethos boost. Typically, they are one of many, and their ideas are simplified and presented without caveats and wrapped in light jargon. In the next section, the way that community building is done within these groups is explored, which includes a closer look at how Wakefield’s article is employed.

Community Building and Ethos

Community building is at the center of the strategies of the anti-vaccine movement. Turning back to the first example from the Liberty Beacon cited above, the work done in the framing of the website as a whole, and the individual articles it uses as evidence, are strategically

used to build an us-versus-them mentality, which builds a community. For example, the use of the Paul Revere like logo is clearly a call to an American mythos. This mythos is steeped in the common understanding that Revere is a major figure in the American Revolution, which was *us* versus and oppressive enemy (at least in American mythology). Coupling the central image of Revere with the name of the group, The Liberty Beacon, and the image becomes clear. This group is a gathering place, a beacon, for those who want freedom, or liberty, and are currently lost—presumably in the dark due to the forces of an oppressive nation. By graphing an identifiable mythic figure onto the brand of its organization, the Liberty Beacon is framing its organization as truly American. Simultaneously, the group is recirculating the image of Paul Revere as a way to create their public. By using such an identifiable image, the group is aiming to form new publics, as well as culling their established publics. Lester Olson demonstrates the ways that the recirculation of images works to build this type of public: “diverse publishers’ and image makers’ circumscribed rhetorical agency by reshaping both the composition itself and its resituated meaning through their derived and re-circulated compositions addressed to subsequent audiences located elsewhere” (Olson, 2009, p. 7). In Olson’s conceptualization, the agency of the original image maker is coopted by the re-circulator—therefore Revere, in this case, is used to make an argument in a realm that his image may not actually sanction. This narrative of freedom is threaded throughout each example cited above, and is clearly evident within the title: “Fourteen Studies: Our Studies (Vaccine Studies the Govt. Wont [sic] show you)” (Staff, 2013). The use of the pronoun “Our” and the positioning of the government as other is clearly a community building strategy.

As noted, a common enemy is a tactic these organizations use to build their community. Building a common enemy is a rhetorical tool that has been studied since Aristotle and, more

recently, become a focal point for the study of rhetoric through Burkean identification (Cheny, 1983). When the CDC released the new prevalence rates for autism in 2012, World Autism Day 2012 became a gathering point for these organizations to rally and an opportunity to better paint the picture of their enemy. Before turning to the enemy it should be noted that the anti-vaccine movement also works on their own ethos through endorsements of known people. As was discussed in Chapter 4, celebrities are one such group that serves as an ethos builders. Another group is doctors who agree with the premises of their argument, whether that be in a macro sense as with a slew of semi-anonymous doctors and articles tagged within each post, or more specifically with the theory generators such as Dr. Wakefield. Katie Wright would be considered a hybrid between celebrities and doctors, in terms of ethos. Katie is the daughter of the co-founders of Autism Speaks, which makes her part celebrity in the autism world and part expert. While Katie's parents founded Autism Speaks in response to their grandchild's, Katie's son, diagnosis, it did not take long for the battle lines of the discourse of autism to mark the family since they were not marked in the organization. Specifically, Bob and Suzanne Wright, the founders, were not interested in having an agenda with Autism Speaks. Instead, they hired a world-class board of directors with the leading autism researchers in the world, and let them dictate the research direction of the organization (Gross & Strom, 2007). The direction of the board is "conservative" according to Katie, who believes in the VCA hypothesis and writes for *Age of Autism: Daily Web Newspaper of the Autism Epidemic* (Wright, 2014). The family is divided, and Katie serves as an ethos builder for anti-vaccine groups.

In the lead quote for *The Liberty Beacon's* coverage of the anti-vaccine event on World Autism Day comes from Katie: "When will the federal authorities wake up? Will it be 1 in 25? 1 in 10? How many children have to suffer from autism to call this an emergency?" (Staff T. ,

2013). This quote, from an ethos builder perspective highlights the common enemy strategy that began this paragraph, as the government and mainstream autism groups are hiding from the facts. Furthermore, this example reinforces the circulation tactics employed by these groups: “rhetorical processes conduct affect, radiating affective energies through processes of circulation and repetition” (Thornton, 2011, p. 405). Extending from beyond information dumping, spotty citations, reorganizations and conceptualizations of materials, this particular quote from Katie relies on affect. The hope is that the audience will feel, in their gut, that they will fear and hate the government and therefore become the public of VCA.

While building a common enemy ties a community together through shared dissociation, having a leader functions to build community through association and identification (Cheny, 1983). For the anti-vaccine movement Andrew Wakefield is their de-facto leader. Wakefield’s research served as the launch point for these organizations and their efforts in autism and he has received a place of prominence in their history and mission. Interestingly, Wakefield is not active in these particular organizations, so he is held up like a celebrity, or perhaps messiah is a better word. Similar to the analysis in Chapter 4 that revealed McCarthy as a Joan of Arc figure, this analysis shows Wakefield as a Jesus figure. Each of these organizations uses any opportunity to publish work that vindicates, in their eyes, Wakefield. The Liberty Beacon paints a picture of Wakefield as an unjustly persecuted: “While repeated studies from around the world confirmed Wakefield’s bowel disease in autistic children and his position that safety studies of the MMR are inadequate, Dr. Wakefield’s career has been destroyed by false allegations” (Staff T. , New Published Study Verifies Andrew Wakefield's Research on Autism -- Again (MMR Vaccine Causes Autism), 2013). In other articles he is called “the victim of a worldwide smear campaign” (Staff T. , Courts Quietly Confirm MMR Vaccine Causes Autism, 2013) and those who decry

him are called “fear monger[ers]” and liars (Vaccine Facts). Wakefield is mentioned in 89 posts at The Liberty Beacon and 61 at Vaccine Info. These posts take one of three forms—he is either mentioned in the history of the anti-vaccine movement as a central figure who was the victim of slander and a conspiracy, with reference to new information that vindicates him, or in a promotional way where his books or appearances are being sold to the audience. In all of these functions, Wakefield serves as a leader for the movement. And in the former two uses Wakefield is metaphorically linked to Jesus and therefore the American mythos.

Summation

This case demonstrates that the internet has allowed organizations a new public sphere. This public sphere also has new tools that allow for creative deployment of evidence/rhetorical tools. The anti-vaccine movement uses their public forums to make unambiguous arguments that take away any nuance to the central debate of VCA and therefore create publics. They flood the visitor with evidence, which is often taken out of context. This allows their ideology to seem *pure* and makes their movements a seemingly natural partner with the anti-government narratives at the heart of the American mythos. Furthermore, these organizations deploy proof from multiple sources, often changing or bastardizing the original sources to suit the purposes of their organizations. This deployment works to create a public and therefore continue the VCA movement. These deployments are tied to other identifiable re-circulations. This type of stitching together of multiple artifacts fits within a circulation lens of analysis as “rhetorical circulation implies that some element moves throughout material and discursive spaces to connect the differently situated moments comprising its organic whole” (Chaput, 2010, p. 13). The organic whole of these organizations is VCA—or anti-vaccines—and this whole is made through *proof* and calls to the mythos of the American spirit. In the next chapter, the macro-level will be

analyzed. First, the performative tools used in congressional hearings will be explored before turning to the alternative collective memories being created by Generation Rescue and Autism Speaks.

Table 1: Dirty 16	
Source (Bolded are the top 10 most cited sources)	Number of Citations (2/2/14)
(Gallagher & Goodman, 2010)	23
(Tomljenovic & Shaw, 2011)	45
(Molina & Shoenfeld, 2005)	135
(DeLonge, 2011)	12
(Sharpe, Gist, & Baskin, 2013)	3
(Lin, Newell, & Nelson, 2002)	122
(Singh, Lin, & Yang, 1998)	196
(James, et al., 2004)	504
(Nataf, Skorupka, Amet, Lam, Springbett, & Lathe, 2006)	114
(Goth, Chu, Gregg, Cherednichenko, & Pessah, 2006)	39
(Burbacher, Shen, Liberato, Grant, Cernichiari, & Clarkson, 2005)	201
(Charleston, Bolender, Mottet, Body, Vahter, & Burbacher, 1994)	82
(Vargas, Nascimbene, Krishnan, Zimmerman, & Pardo, 2005)	809
(Herbert & Arranga, 2006)	86
(Waly, et al., 2004)	193
(Werner & Dawson, 2005)	227
(DeSoto & Hitlan, 2007)	86
(Seneff, Davidson, & Liu, 2012)	10
(Poling, Frye, Shoffner, & Zimmerman, 2006)	96
(Sajdel-Sulkowska, Windom, Audhya, & McGinnis, 2008)	67
(Herbert, 2005)	135
(Kern & Jones, 2006)	138
(Chauhan & Chauhan, 2006)	255
(James, Slikker, Melnyk, New, Pogribna, & Jernigan, 2005)	145
(Petrik, Wong, Tabata, Garry, & Shaw, 2007)	65
(Gorrindo, Lane, Lee, McLaughlin, & Levitt, 2013)	3
(Palmer, Blanchard, Stein, Mandell, & Miller, 2006)	172
(Homes, Blaxill, & Haley, 2003)	254
(Geier & Geier, 2007)	60
(Croen, Grether, Hoogstrate, & Selvin, 2002)	403
(Gargus & Imtaiz, 2008)	31
(Anderson, Hooker, & Herbert, 2008)	23
(Neustadt & Pieczenik, 2007)	7
(Rossignol & Bradstreet, 2008)	34
(Palmer, Blanchard, & Wood, 2009)	94
(Oliveira, et al., 2007)	80
(Yel, Brown, Su, Gollapudi, & Gupta, 2005)	61
(Humphrey, Cole, Pendergrass, & Kiningham, 2005)	59
(Kawashti, Amin, & Rowehey, 2005)	14
(Hewitson, Lopresti, Statt, Mason, & Tomko, 2010)	18
(Young, Geier, & Geier, 2008)	84

(Schulz, Lindenau, Seyfried, & Dichgans, 2000)	754
(Gallagher & Godman, 2008)	30
(Minami, Miyata, Sakamoto, Yamazaki, & Ichida, 2010)	16
(Kempuraj, Zhang, Manola, Hogan, Peterson, & Theoharides, 2010)	31
(Walker, Segal, & Aschner, 2006)	21
(Olczak, Duszczyk, Mierzejewski, & Majewska, 2009)	25
(DeSoto & Hitlan, 2010)	17
(Woods, et al., 2010)	9
(Rossignol & Frye, 2011)	115
(Migdal, Foggia, Tailhardat, Courtellemont, Haftek, & Serres, 2010)	13
(Blaxill, 2004)	185
(Rimland & McGinnis, 2002)	4
(Ratajczak, 2011)	53
(Shandley & Austin, 2011)	12
(Olczak, Duszczyk, Mierzejewski, Wierzba-Bobrowicz, & Majewska, 2010)	10
(Olczak, Duszczyk, Mierzejewski, Meyza, & Majewska, 2011)	10
(Zhang, Xu, Li, & Xu, 2012)	3
(Wilson, et al., 2011)	8
(Duszczyk-Budhathoki, Olczak, Lehner, & Dorota Majewska, 2012)	8
(Olczak, Duszczyk, Mierzejewski, Bobrowicz, & Majewska, 2010)	11
(Holland, Conte, Krakow, & Colin, 2011)	30
(Dórea, 2011)	31
(Hamz, 2012)	0
(Sulkowski, Chen, Midha, Zavacki, & Sajdel-Sulkowska, 2012)	9
(Hertz-Picciotto & Delwiche, 2009)	210
(Khan, et al., 2013)	13
(Blaxill, Redwood, & Bernard, 2004)	62
(Windham, Zhang, Gunier, Croen, & Grether, 2006)	201
(Christian, Iams, Porter, & Glaser, 2011)	10
(Brown, Sourander, Hinkka-Yli-Salomäki, McKeague, Sundvall, & Surcel, 2013)	12
(Wakefield, et al., 1998)	1811

CHAPTER 6: MACRO-LEVEL—INSTITUTIONAL REALM ANALYSIS

In this final analysis chapter the exploration moves to the macro-level and examines how institutions define and create the discourse of autism. The first case of this chapter centers on the 2000 and 2002 Congressional hearings on the link between autism and the measles, mumps, and rubella (MMR) vaccine. These hearings are viewed through Judith Butler's performative lens given their structure which includes a formal hearing where literal performances take place—which involves parents who believe in the *Vaccine Cause Autism* (VCA) myth telling their stories in 5 minute time slots and experts from both sides of the debate saying their piece. Given the theater that is required of such truncated timeslots (5 minutes) to lobby for a cause central to the witnesses' sense of self in front of a live audience, coupled with the repetition that the format breeds, performativity proved to be a compelling angle. The second case turns to how the collective memory of autism and the history of autism is remembered and created through two different organizations: Autism Speaks and Generation Rescue. These groups fall on opposite sides of the VCA debate, and are both considered to be reputable—with Generation Rescue serving as a mainstream thrust of the anti-vaccine movement through a green the vaccines rhetoric and a rhetoric of recovery.

Case 1: Congressional Hearings

The first case at the macro level examines two Congressional hearings conducted by the United States House Government Reform Committee. The first of these hearings was held on April 6, 2000 and was called "Autism and Childhood Vaccines" and the second hearing was held a year and a half later on December 12, 2002 and was titled "Vaccines & Autism." Each of these

hearings were chaired by Indiana Republican Dan Burton, who became a champion of the Vaccine Injury Compensation Fund, and later VCA through these public hearings, after his grandson was diagnosed with autism, which he claims was caused by vaccines. These hearings were chosen as artifacts for analysis at the macro-level because they were the first and second hearings on this subject at the governmental level, putting the VCA myth in the public, institutional record.²³ The first hearing was five hours and fifty-seven minutes and included 24 speakers—6 parents, 4 Congressmen, and 14 doctors and researchers. The second hearing was three hours and twenty-seven minutes and included 11 speakers—5 congressman and 6 doctors and researchers. These hearings are slanted toward VCA with a minority of the voices questioning the validity of the claims of the VCA myth (championed by minority committee leader Waxman). Furthermore, the hearings create a platform for the VCA myth to be expanded, with the witnesses telling their stories in public and having these stories officially recorded by the US government—which lends itself to a performative analysis.

Performativity

The lens for this case study is Butler's performativity. Performativity is the process of normalization through repetition of behavior. Defining health myths as discourses of power through their ability to regulate behavior allows for a performativity lens to be a powerful tool. In other words, if a myth is believed, then those behaviors associated with a myth are enacted. After being enacted multiple times, these behaviors become *natural* or *normal* and eventually they become routinized. This routinization can be thought of as a performative echo. Butler (1990) uses gender as her discourse to explain the embedded nature of performativity,

²³ A third hearing was held in 2012, but was omitted from this artifact construction due to the framing of said hearing—specifically it was much more grounded in scientific jargon and did not add to the finding from these first hearings.

demonstrating that the actions of male/female and masculine/feminine are automatic and therefore these actions, while under our autonomous control, go without question and therefore perpetuate across culture as they become norms (everyone is doing it). Once something becomes natural to a set of people, then arguing with empirical evidence to the contrary is futile.

In her later work, Butler (1993) furthered this idea of performativity, clarifying the way that performative actions accumulate over time and therefore transmit from person to person and generation to generation:

“If a performative provisionally succeeds, then it is...only because the action echoes prior action, and *accumulates the force of authority through the repetition or citation of a prior, authoritative set of practices*. What this means, then, is that a performative ‘works’ to the extent that it *draws on and covers over* the constitutive conventions by which it is mobilized. In this sense, no term or statement can function performatively without the accumulating and dissimulating historicity of force” (p. 172; emphasis in original).

Health mythologies must act performatively to be pervasive because this accumulation of force fortifies communities that are at odds with the dominant discourse of health. The health behaviors linked to a health mythology are, according to the mythology, health positive—but this belief is counter to the mainstream medical understandings of these behaviors, which views them as neutral or negative. When the behaviors are enacted by a subscriber to the myth, than that is one repetition. Both individually and communally then, these behaviors are performative as they construct the discourse of the myth for those who subscribe to the myth.

The performativity of these particular artifacts extend beyond the actions of myth adherence to the repetition of how evidence, conveyed mainly as stories, are shared at these

hearings. The performative element is evident from the outset, as the way a House committee hearing functions is through a citation of previous hearings. There is a formal procedure that includes the reading of regulations and consents and opening statements from the committee. Furthermore, once the microphone is ceded to the witnesses there is still a formal procedure for engagement. In the 2000 hearing, each autism-afflicted family member is allotted 5 minutes to tell their story, with each expert having as much time as they need. The parents are not questioned by the congressmen, while the experts are. In the 2002 hearing, each witness is asked to be brief, but, unlike the parents in the 2000 hearing, no one is cut short. The apparatus of the proceedings are certainly a performance, in a pure sense—drama. However, the citationality that Butler (1990) cites as the impotence for performativity is also central to this artifact. As mentioned above, the performativity of these hearings is part of the apparatus, as the apparatus cites previous hearings, but more importantly the testimony of the afflicted families and relevant health experts are citations. These are not only citations of previous hearings, but also citations of each other. In other words, the parade of afflicted-family members allows each new testifier to cite—in a performative and literal sense—the previous testifiers. In fact, most interesting to this project are the intra-hearing citations the parents of the afflicted employ—as each parent tells virtually the same story, with the same beats. These repetitions, as will be explored below, are also citations of the greater narrative-making in the VCA universe—which will be evident by the familiarity of the tales told to tales reported in this project in previous chapters.

Parents: Shared Story and Purpose

The parents who were called as witnesses, as well as the committee chair, each shared the story of how their child (or grandchild) became afflicted with autism. These stories followed the same narrative path as the story that was outlined in Chapter 4 shared by McCarthy and the other

mothers from her books and the stories of those parents in the mainstream media: a story of a robbed childhood and, in turn, a robbed parenthood. At the core, this shared story—where a child is normally developing, loving, communicative, and then shortly after receiving a vaccine recedes into a prison of the mind—is a citational act, making it performative. However, this type of citationality alone can also be viewed through the lenses of hegemony, collective memory, dramatic analysis, the narrative paradigm, and more. What makes the testimony of these witnesses stand out as something warranting a turn to Butler’s performativity is the echo of the hearings themselves, the eerily similar beats and metaphors employed, and the physical and emotional displays of the witnesses during the hearings.

The first parent witness in the 2000 hearing was Kenneth Curtis, who had an 8-year-old moderately autistic son. Curtis begins his testimony, and the echo, with a preface to his story that he is at the hearing to “Speak on behalf of my son, my family, and child with autism nationwide... This is his story.” Curtis expands the import of his 5-minute testimony by claiming to be a rhetorical stand-in for not only his son, whose story it is, but also for all those afflicted and their families. This preamble, in and of itself, is a powerful rhetorical tool, but it serves as a template for those parents who follow. Each parent begins his or her testimony by making a similar claim to speak for a great number of constituents. And each of these claims is a citation of Curtis’s original claim (clearly, this rhetorical move existed prior to this hearing—Curtis is the originator in this hearing alone). It is not possible to prove causation, nor is it the intent of this analysis, as the echoing of this strategy is performative whether or not the orators intended to begin their testimony this way prior to hearing Curtis’s testimony. James Smythe is there to “speak... for my son and the tens of thousands of autistic children around the country and the millions who are affected by this [disorder].” Each parent makes similar claims, some

referencing organizations they have starting or the thousands of other parents they have spoken with, which creates a crescendo. In other words, if each witness represents a bloc of the afflicted, then the bloc of witnesses represent an even larger bloc of afflicted. It should be noted that this claim was not limited to just the parents, with the called researchers also making this type of claim through those they have treated, spoken to, and/or keynoted to. And while the congressmen did not make this explicit claim, perhaps the fact that they literally represent a bloc of people through their position is the first citation of this performative act within this hearing.

Coupling this common preamble with the second part of the Curtis quotation above reveals the template for the start of each witness. Each witness, researchers included, claim that the stories they tell are the stories of those without voice—*eunoia*. Therefore, the act of speaking at this hearing is a performative move to grant agency to the agency-less. Metaphorically, this move represents the unlocking of the prison in which each of these parents claim their child is trapped. This demonstrates the power of both citation and agency within the performative paradigm as Just and Christiansen so elegantly state: "Performativity addresses the conditions of possibility of agency, and thereby accomplishes the theoretical and analytical shift from individual human agents to the agency offered by discourse." (2012, p. 321). In the case of this hearing we see the discourse of speaking for as a shift in agency, whereby the witness evokes the power for whom s/he speaks. This power is metaphoric in terms of numbers—constituents—but also in terms of ethos. Expressly, the witnesses are providing evidence that they are qualified to be on the record for this hearing—to be institutionally sanctioned as witnesses—by way of their afflicted family members. Furthermore, by evoking others outside of their family circle, the witnesses are reaffirming the right for the hearing itself to be a subject of institutional record. Therefore, the witnesses are performatively creating ethos through the citation of others. While

there is the intra-hearing performative echo of speaking for the agentless, there is also a citation of the cultural stories of the larger VCA movement.

Specifically, by claiming that those they speak for cannot speak, these witnesses are citing the lack of agency that the afflicted possess. This lack of agency is labeled differently by different witnesses, but each label references back to the cultural discourse of autism as a prison. Some witnesses specifically reference the prison metaphor, but others also twist this metaphor slightly: “there is a little boy inside him somewhere. It’s like he’s lost,” “child disappears within days or weeks into the abyss of autism,” or “the light behind his eyes was replaced with a blank, lost, bewildered stare.” With these examples, the performative echo and the accumulative effect can be felt. Furthermore, the reciprocal influence of this hearing and the greater VCA discourse has weight in these descriptions. The congressmen and researchers called as witnesses amplify this echo through video documentation of the lost children. In the most compelling, and graphic, example of this amplification, Representative Dan Burton in the 2002 hearing, shows a four-minute video of an extremely autistic boy. In the video, the pants-less boy chants nonsense while crying, hitting himself, the floor, and the walls, and pacing. Rep. Burton sets this video up as an example of how autism steals children from their parents, a motif that will be discussed below, but this also demonstrates the afflicted inability to speak for themselves. This inability is license for the witnesses to performatively evoke these afflicted, entrenching and intensifying this performative echo.

The similarity of the parents’ stories is not surprising on its surface, as each of these witnesses was called to testify for the same reasons: they are there to provide evidence for Rep. Burton’s view that VCA is accurate. However, the most surprising findings are the near identical metaphors and beats within each story. Each of the parental witnesses culls the same metaphor of

disaster, with the majority of the witnesses using weather related disaster. Mr. Curtis frames the evidence of his sons autism as a drizzle turned to a “downpour,” while Ms. Reynolds calls it a “hurricane.” Each metaphor has a building effect, where the child is normal and the family is perfect and then a storm or disaster comes to destroy all that was built. The disaster metaphor is part of the intra-committee performativity and is built on through the ways that the metaphor is supported. The families describe, as Ms. Reynolds states, “the American Dream” which autism has destroyed. The destruction is described in multiple arenas—from the loss of childhood, to the struggles of parents emotionally and financially.

The stories use the American Dream as the foundation for why the stories matter. The parents paint a picture for the audience where their lives were perfect prior to a VCA incident—with perfect relationships and children. This picture starts with committee chairman Burton, who in 2002 stated concisely: “Now my grandson, and thousands of children across this country were normal kids [prior to their vaccination].” The performative echo extends beyond normal/abnormal dichotomies to a heaven/hell dichotomy. Parents call their lives prior to autism “story book,” “perfect,” and “the American Dream,” with autism ruining this picture and creating “a storm,” “disaster,” and embarrassment. These echoes are more than just intra-hearing echoes, as they are part of the larger discourse of VCA, and in one way, build a community around VCA. Here, these parents, share the same pain, the same loss, and through sharing become a real, material community, on the record.

Not only are the metaphors and the American Dreams crushed citations, the emotional beats of the stories are as well. As each parent describes their lost child they break down in tears (save the last parental witness). This breaking down, and the subsequent recollecting of oneself, is a performative beat: “performativity is not just about speech acts. It is also about bodily

acts... There is always a dimension of bodily life that cannot be fully represented, even as it works as the condition and activating condition of language” (Butler, 2004, pp. 197-198). This claim is strengthened by the tissue box. The first parent, Mr. Curtis, cried for a couple of beats before a person walks across the room with a box of tissues. This box is then preemptively passed down the table (all six parental witnesses are seated side-by-side at a long table) prior to the next witness starting. Not only is the breakdown a cited beat, but it is understood to be a cited beat. In other words, since the tissues are passed before the next witness cries, the expectation of each witness is that the next witness will cry too. We can extend this performative echo to the shared emotions of the panel—which includes the parents, congressmen, and researchers. Each witness displays sadness, anger, and confusion. These emotions are part of the citational network built at these hearings, and crescendo as the hearings persists—with each subsequent witness, seemingly, one-upping the last in terms of displayed emotions.

This performative lens allows for the uncovering of how the hearings function as echo chambers both inside the hearing and outside, with these stories building from others in the mainstream VCA movement and vice-versa. David Weiss’s (2005) exploration of how performative acts can be used as tokens of identification is fitting for this case:

“If identities are not so much revealed by language as they are ‘accomplished in and through the use of language,’ then the study of people’s utterances is not a process of uncovering who they already ‘are,’ but is rather an act of surveillance: an observation of a work in progress, the ongoing construction of the project that is the dynamic development of identity” (Weiss, 2005, p. 78).

Through this lens, the witness's performative acts are defensive acts. Therefore, the witnesses must share the same story, with the same metaphor and beats, and they absolutely must share the same emotion. These citations, or shared activities, are markers of group identification. The parents sharing their lost vacations, chances to play basketball with their child, birthday parties, family trips to the grocery store, etc. are sources of credibility within the community formed around VCA.

Interestingly enough, the area for which these witnesses hope to build an echo is not something that they have experienced. In other words, the core point of this testimony is to stop parents from vaccinating their children until the government makes vaccines safe—which these witnesses do not think will happen. And these witnesses did vaccinate their children and therefore cannot start this echo through behavior. To make up for this, each witness retells their story of vaccination as a cautionary tale. Within these tales is regret and betrayal, as the witnesses feel dumb for having trusted so blindly, and betrayed for believing that they were doing right by their children. While this echo cannot begin with these parents, their political act can be a cue to action for others, and in the public domain, marks them as true actors in the performative chain of non-vaccinations:

“Butler’s emphasis on the extent to which our bodies have a public dimension reminds us that struggling for autonomy requires a struggle for a conception of the self within a community; ‘to live a life politically, in relation to power, in relation to others, in the act of assuming responsibility for a collective future.’” (Gray, 2005)

As with Chapter 4’s case study of Jenny McCarthy, this case study does not intend to chastise or fault the subjects of the case. Instead, I simply mean to demonstrate how their political, public

acts may be part of the performative chain in the VCA movement. These parents are living a life politically, literally, and as such relate their own, in this case non-performative, choices as a start of a performative chain. This grants them agency within VCA and therefore within their community.

Summation

In the end, each witness extends her/his story to include the childhood and child lost, falling back on the VCA discourse at large. Dr. David Baskin, a Neurological Surgery Professor at Baylor College of Medicine and a witness in the 2002 hearing, states: “Many of them will never be able to look at their parents and even tell them they love them... These children never had a chance to enjoy life.” This statement is an echo from the 2000 hearing and is the core principal in which this community, and the performative chain these actors hope to start, rallies around: no more lost children. Through this performative analysis, it is clear that the institutional realm, intentionally or not, helped to sanction the beliefs, stories, and performative hopes of the VCA movement. The hearings provide little debate, with only a couple of dissenting voices. But even these dissenting voices praise the witnesses and Chairman Burton for their courage in sharing their stories and beliefs. And their dissent is based on the need for more research, which allows the VCA supporters, embodied by Rep. Burton in this example, to turn cast their dissent aside thusly in the 2002 hearing:

“And for our FDA and HHS and health agencies to continue to hide behind this façade that there have studies have concluded to prove otherwise is just wrong too. Because not one of them is going to tell you that there is no doubt whatsoever that mercury in vaccines does not cause or contribute to autism. The same is true of the MMR vaccine. We need to have conclusive evidence.”

By pointing to the lack of a conclusive never from the scientific realm, a realm founded on the fluidity of proof, Burton emboldens the claims of the witnesses and puts the VCA into the institutional realm as a core principle of a rightful crusade against corruption.

Case 2: Collective Memory

In Chapter 3, the intricacies of collective memory were explored—demonstrating that a study through a lens of collective memory has the ability to uncover the ways in which discourses are presented by different constituents. This gives the rhetor the ability to construct a fuller picture of how a particular discourse functions within specific cultures and, perhaps, offer a counter reading. While the case presented below will not offer a subaltern reading like Jason E. Black’s work cited above, this case study does demonstrate the ways in which symbols of autism are used by different constituencies and therefore follows Barbie Zelizer’s lead in reconstructing how memories tap into different aspects of hegemonic orderings to propel a particular construction of the world. In other words, the history and present of autism are framed and told differently by Generation Rescue (GR) and Autism Speaks (AS). Each group offers their own tale as definitive and builds their own semiotic meaning around both unique and shared symbols. The interpretation of these symbols, some of which are mainstream, becomes a marker of identification for the interpreter. These organizations were chosen as artifacts for this case as they represent the most respected independent organizations in autism research on either side of the VCA debate. GR advocates for VCA, though they air on the side of caution and state their case as “green-the-vaccines,” and is the most recognizable organization fighting on that side of the debate with Jenny McCarthy as its president. Conversely, AS is the most well-funded non-governmental organization in autism research and advocacy, and falls in-line with the scientific community in regard to VCA.

This section sketches the discourse of autism that each of these groups creates. These discourses both draw from the mainstream version of autism, but create fundamentally different histories of autism. The differences are not framed as active debates within the mainstream understanding of autism. Instead, they are presented as fact and therefore each discourse is presented as the *sole* collective memory of autism. It should be noted that this section employs the term collective memory more broadly than much of the scholarship. I choose to employ memory as an available discourse for constituents to adopt. If adopted, this discourse, and the history it represents, becomes the memory of the adopter. That being said, as Pierre Nora establishes:

“Memory and history, far from being synonymous, appear now to be in fundamental opposition. Memory is life, borne by living societies in its name...History, on the other hand, is the reconstruction, always problematic and incomplete, of what is no longer there” (1989, p. 8).

This quote demonstrates the slippery terrain that this case stands on. To secure my footing, I rely on Maurice Halbwach’s grounding of collective memory as a process in which multiple people remember the same events, filtered through their own experiences and roles. These shared events continually bind these people together through repeated points of identification (e.g. retellings, commemorations, reunions, etc.). With this understanding at the center of this case, coupled with the case examining the organization of the discourse of autism through institutions, history and memory are actually very closely related. History, in this conceptualization, is the manipulation of artifacts to build a coherent discourse; where memory is the interpretation of these manipulations. Through this lens, the following case begins by exploring the ways these

organizations present themselves before turning more specifically to the history and, in turn, memory they create.

Generation Rescue and Autism Speaks: Setting the Stage

GR proclaims itself to be “a national non-profit organization providing immediate treatment assistance, information and hope to families affected by autism spectrum disorders.” Conversely, AS states that it is “the world’s leading autism science and advocacy organization, dedicated to funding research into the causes, prevention, treatments and a cure for autism; increase awareness of autism spectrum disorders; and advocating for the needs of individuals with autism and their families.” From these organization descriptions the similarities and differences between the two groups are apparent, and some of the nuances for the memory of autism they craft seep through. First, it is clear that both organizations are interested in being viewed as credible through the use of the terms “non-profit” for GR and “world’s leading” for AS. This ethos is announced throughout the sites with seals-of-approval, testimonials, and other markers of status. Second, each organization appeals to their primary audience through a direct mention of their efforts to advocate for families of the afflicted. By calling on their ethos, each organization sanctions the discourse, history, and memory of autism that they present. This type of appeal to ethos is not a particularly surprising rhetorical move and does not factor into the divergent discourses each site paints. Instead, the differences in these main statements foreshadow the askew themes that run through each of these organizations’ rhetorical crafting of the discourse/memory of autism.

Furthermore, the differences, aside from being more important to this case, are also subtler. GR positions itself as having the answer for families in need through their claim to have “treatment assistance.” This claim is echoed in the structure of their website through the three

main portals on the home page are titled “Recovery,” “Prevention,” and “Treatment.” The direct nature of these titles builds a discourse where the puzzle of autism is already solved. The puzzle piece logo of AS, which is a ubiquitous symbol for autism, is absent from GR materials, undergirding the confidence in their version of autism. The pictures accompanying the portal pages also beg for confidence in this version of the discourse. The recovery photo shows two parents smiling and swinging a gleeful son between them; the prevention tab is headed by a naked pregnant belly being caressed by its owner; and the treatment tab shows a mischievously smiling boy looking into the camera with a blurred doctor behind him. Each of these pictures taps into the hegemonic discourse of family, which, constructed here, would include happy, tender, and silly moments, respectively. Each of these pictures soothes/assuages the fear and anxiety that a child without smiles, a promised caress, and a child without humor induces. These pictures serve to undermine the mainstream discourse of autism, as this discourse promises a child without smiles, who does not caress, and will never understand humor.

This type of counter construction is key to assembling a unified history of a discourse, as these histories are not told in a vacuum. The mainstream version of autism is a starting place for these organizations. As has been shown in previous chapters, this version of events includes the themes of autism as a robber of youth and childhood through the dulling of autistic children’s happiness. This dulling is evident, so the discourse goes, through the absence of smiles and need for emotional and physical connections with others. These details build into a supplemental theme of a robbed parenthood, as the parents do not receive their promised benefits of their child. All this is to highlight that the work being done on this main page of GR is in direct conversation with these themes and the larger, mainstream, discourse of autism. The portal and, in turn, the key promise of GR is the gift of an emotional, loving, and innocent child back to their families,

which then gives them back their parental rights that the mainstream discourse of autism says will be taken away. Furthermore, the building of family as the central theme of GR calls back to Halbwach's foundational work on collective memory. Specifically, GR uses the promise of what it means to be parent and child as a pathos-laced rhetorical tool to buy their version of autism—a version with an environmental trigger and a cure. The promise, supported by the visual rhetoric, is grounded in these established, hegemonic roles of family—the roles which Halbwach's showed allows for shared discourse through the collective or cultural memory of these roles. Furthermore “affect and memory interanimate one another—affect evoking memory and memory evoking affect” (Blair, Dickinson, & Ott, 2010, p. 40). Through these photos, GR utilizes the affective punch in the gut that afflicted families feel when thinking of a normal life to activate the memory of the promised child and parenthood returned.

Other than the three portals, logo, mission, and a few basic menu options that are small in size (About, Recovery, Newly Diagnosed, Resources, Blog, Events, and Stores), the main page has just one picture (the backdrop to the mission) with a link to a personal story of the “Journey [from] diagnosis to recovery.” The simple layout, which will be described and analyzed more fully below, makes the site easy to use—reinforcing the target audience as parents of the afflicted, versus professionals—which builds on the strategy of utilizing hegemonic roles to create a coherent history and, in turn, memory. The main picture is of a boy playing in the dirt, which along with the pictures mentioned above, reinforces the theme of a recovered childhood and the collective memory of the roles of children and parents. It is fitting that the picture is also the boarder for the personal story, as this story directly references the promise of recovery and therefore the restoration of childhood.

While GR promises a life that is “normal,” AS takes a more clinical approach without completely squashing this same promise. From AS’s mission statement it is clear that the organization is mainly focused on research and therefore less focused on afflicted families. There is a more sterile feel to the mission, as it starts with a statement about leading in “science” and “advocacy,” but follows these core values with a long list cataloguing what AS does. This comprehensive list aims the focus of AS away from individuals with autism and their families, in favor of a more communal view where the key to autism is knowing that there is a community out there and that AS is there to study said community. In other words, AS aims at autism on a global level versus the local level of GR. AS, therefore, is institutional in its presentation, while GR is more familial or grassroots like. A return to Halbwachs’s contention that social roles are prominent in memory demonstrates that this seemingly innocuous distinction in website presentation—clean and focused versus cluttered and broad—is actually key to understanding the greater memory each organization crafts.

“No matter how we enter a family—by birth, marriage, or some other way—we find ourselves to be part of a group where our position is determined not by personal feelings but by rules and customs independent of us that existed before us” (Halbwachs, 1992/1941, p. 55).

Extending this to the idea to the differences between these two websites reveals that GR and AS position themselves in different social roles—GR as friend or family member and AS as fellow clinician or scientist; therefore, GR and AS activate different interpretive patterns in their users. The ramifications of these choices in casting have reciprocal casting implications (where the user is cast into different roles) will be more fully explored in the coming sections.

AS's main page reflects their more global approach to autism as it is filled with a myriad of options and portals. While GR has a clean look with only three main choices and a small menu with 7 options, AS gives users 8 options on the large main menu bar (Home, Ways to Give, Research, Family Services, What is Autism?, Advocacy, Events, Attend a Walk, and About us). Additionally, there is a sub-menu with another 7 options (Merchandise, Blog, Partners, Resource Guide, Tool Kits, Autism Apps, and Screen Your Child) and below that is a rotating main story window with four rotating stories, a side bar with a slew of sponsors logos, and 5 headed columns (News, Research, Family Services, Official Blog Posts, and Advocacy News) with anywhere from 5 to 9 links below each heading. This description should demonstrate how AS takes a broad view of autism and segments its audience through the abundant options. Furthermore, these options are often linked to different constituents, with blog posts from afflicted, afflicted family members, researchers, etc. and news that covers everything from local events to major discoveries. It is also worth noting that each heading is backed by a silhouette of a puzzle piece on its side, perhaps alluding to the importance of each realm on the site—as pieces to the puzzle that is autism.

The main pages and missions of these organizations lay the foundation for the competing discourses, histories, and memories constructed around autism. GR opts for a clean look with few options. The main color is black, which allows their logo, which is a broken rainbow colored circle with a silhouette of a child's face, to stand out. This simplistic structure is inviting and sends a message of care. It sets up their discourse as one that is focused on the afflicted and their families. Conversely, the cluttered façade of AS demonstrates that it is committed to taking a wide-sweeping view of autism and inviting as many voices to the discussion as possible. This makes the message seem less personal than GR and directed more at the broader conversation of

autism itself. The logo of AS is a single, light-blue puzzle piece. This logo is part of the mainstream discourse of autism and therefore taps into the collective understanding of autism, which—as shown in the previous chapters—includes fear of a lost child. The puzzle piece, echoing the analysis of Chapter 4, can stand for the enigma that is the child and/or the clues needed to help solve the riddle that is autism. For AS the puzzle piece alludes to their greater mission to solve autism—where the piece represents the clues AS seeks in its research to better understand the disorder. Furthermore, the puzzle piece serves as a landmark in a site of memory, which Black shows can “constitute how a culture perceives its past character and guide how it should move forward as a whole, with those constitutive perceptions as a basis for envisioning the future” (Black, 2009, p. 200). If these websites are viewed as curated sites of memory, then the choices within these websites become the semiotic markers and makers of meaning. The puzzle piece situates the memory, history, discourse, and therefore the future of autism as a mystery. This contrasts to the confidence projected by GR, undercutting the AS approach. In other words, the differences in how GR and AS presents their artifacts create the different memories of autism. GR erases negative histories of autism through their absence and instead highlights an alternative history that breeds positive memories of autism. AS embraces the plethora of histories, cluttering their space and therefore creating a memory of autism that is cluttered and, frankly, bleak and overwhelming. In the next section, the ways that these different foundations are built upon are looked at more closely through the way the autism is defined and the roles each organization casts the different constituents in.

What is Autism?

One of the most telling differences in the discourse construction between these organizations, and another example of how their different approaches to autism is evident

throughout their organizations, comes from the names and subheadings of these organizations. AS's subheading is "It's time to listen," a response to their name Autism Speaks: while GR's subheading is "hope for recovery." These titles and subtitles echo the fundamental chasm between the presented autism discourses. First, AS grounds its name and subheading within the assumption that autism is permanent, which is evident through the agency autism is granted in the title. In other words, if autism does speak, then autism has agency in this construction of the discourse, so the change AS seeks is within the non-autistic community for them to listen. Conversely, GR does not grant autism this same agency—following the lead of the parents speaking for their children in the previous case. Instead, their title and subhead leave autism as a target with the organization proclaiming that the current generation are the rescuers. The nuance between these differences goes back to the definition of what autism is to these groups and how those who have aligned their own philosophies with these groups define the afflicted. For AS the afflicted have a chronic condition and are, in some ways, defined by said condition. For GR the afflicted have an acute condition and their true selves are hidden by this condition and this condition should no more define them than a cold.

Furthermore, this difference illustrates the different temporal spaces in which these organizations operate. AS operates in the past and the act of listening is a marker of this past because it situates autism as a being with the ability to speak, metaphorically. Conversely, GR operates in the now or the future, forgoing any mention of the past and instead culling images of users' imagined future—with hope. This distinction can be extended to the theory of *mnesis*, or forgetting. Nathan Stormer highlights how all memory includes forgetting and the process of forgetting creates *mnesis* or "the simultaneous action of remembering and forgetting" (Stormer, 2013, p. 30). In the present example, AS engages *mnesis*, while GR erases it. In this paradigm,

forgetting is always present, but by creating future-grounded memories GR's memory of autism is fundamentally divorced from AS's memory and mainstream memory. Conversely, AS dwells in the past—"listen"ing to it as its mission—and therefore performatively revives the past over and over again, constructing a memory rooted in mainstream understandings (Stormer, 2013, p. 30).

Nowhere is the difference between how these organizations construct the memory of autism more stark than in how they define autism. This starts with the fact that AS has a dedicated link titled "What is Autism?" that clearly defines the disorder, while GR avoids such a direct path. Instead, autism for GR is defined through stories of hope and recovery. On AS's definitional page there are 843 words with 4 headings (What is Autism? What is Autism Spectrum Disorder?, How Common is Autism?, What Causes Autism?, and What Does it Mean to Be 'On the Spectrum?'). The descriptions under the first three headings are clinical. Under the "What is Autism?" heading, the DSM-V is used as a reference and the disorder is grounded in "brain development," while the "How Common is Autism?" heading gives the incidence rates. The "What Causes Autism?" section provides a little more substance, as AS begins by proclaiming that "Not long ago, the answer to this question would have been 'we have no idea.' Research is now delivering answers." The section goes on to describe a slew of possible causes including genetics, non-controversial environmental factors (e.g. parental age at conception, maternal illness while pregnant, oxygen deprivation), and the lack of folic acid while pregnant. This clinical list feeds into the research being conducted at AS, complete with a link to the research page—ensuring that this version of autism includes AS as a major player in its history. Finally, the "What Does it Mean to Be 'On the Spectrum?'" section provides the most heartfelt

rhetoric on the site. The section begins by stating that “Each individual with autism is unique.”

And it closes with:

“Autism Speaks’ mission is to improve the lives of all those on the autism spectrum. For some, this means the development and delivery of effective treatments that can address significant challenges in communication and psychical health. For others, it means increasing acceptance, respect and support.”

This section functions as AS’s heart, demonstrating that despite the clinical feel, AS is really there for the betterment of those afflicted with autism. It is important to note that the afflicted families are left-out of the discussion here (as they are on much of the site), which is a significant difference from GR. Furthermore, despite the warmth of the quote above, the clinical underbelly is still apparent with the call to research through “development and delivery of effective treatments.” Here again, it is evident that GR relies on the collective memory of familial roles to induce identification with their version of the history of autism, while AS eschews this convenient casting for the more foreign (to most) clinical role casting.

GR’s approach to defining autism is on the other end of the spectrum compared to AS. First, instead of having a page with an information dump, GR has a page titled “Recovery” and assumes the audience knows the facts about the disorder. Another major departure for GR is the absence of symptomatology. While AS grounds their discourse of autism with how it can affect the afflicted, GR avoids any such descriptions. Instead, GR focuses on the recovered state, calling back the theme of a childhood and parenthood returned. The page begins with the affirmation “Generation Rescue believes in autism treatment that brings hope for recovery.” Next to this statement is a photo of a stack of three laughing children that serves to underscore

the theme of a childhood returned. Under this affirmation are three snippets of recovery and then a short paragraph. The snippets function in the same vein as the picture and the affirmation, reinforcing a discourse of autism as acute and treatable: “A 12 year-old boy looks at his father and calls him *Dad* for the very first time... A 5 year-old girl becomes fully potty-trained...A 6 year-old boy is finally sleeping through the night.” While GR does not explicitly mention the symptoms of autism, these snippets do call back to the mainstream discourse of autism and imply the symptoms in the negative. In other words, these snippets say that autistic children, in the mainstream discourse, do not look at their parents and connect with them, cannot be potty trained, and cannot sleep through the night. By focusing on the recovery, GR creates a discourse that questions the mainstream discourse.

The remainder of the page includes links to tools for families of the afflicted, as the preamble states “Here are powerful tools for your journey.” The links include: Autism Action Plan, Autism, Checklist, Biomedical Treatment, Find a Rescue Angle, Stories of Recovery, Recommended Reading, Autism Yesterday Video, and Find a Doctor. These links, and their framing, continue GR’s push to build the website for afflicted families. They also provide a path for a community—a community that subscribes to GR’s version of the autism discourse—including affiliated doctors. Grounded in the study of memory and memory making, GR creates a site of memory that pushes its visitors to other GR supporters. The positioning of family at the center of the site functions to cull the memories of family and the social roles of family. By providing a journey, or a guided tour, GR creates a site of memory that is future oriented and erases the institutional memory of autism that deems it damning. While GR and AS both mention hope and recovery, the discourse and the collective memory that GR creates and taps into are fully steeped in hope. AS relies more on the collective, mainstream understanding of autism and

therefore creates a discourse of discovery and research, where hope is relegated to a distant time point at the end of the scientific method. In the final section of this analysis, the ways in which AS and GR cast the roles of their organizations and constituents in explored more fully.

Casting Roles

As stated above, Halbwach's foundational work on collective memory includes explorations of how social roles function as touchstones for how we remember. Being a father versus a son in the same situation changes the interpretation of that situation. The son will remember the situation differently, perhaps looking up to the father, than the father. Furthermore, these roles allow society to function without people having to relearn how to act in each situation. In other words, as both a student and teacher I have different roles in the classroom. When I take the role of the teacher, I generally stand at the front of the class and lead the day's activities. Conversely, when I take the role of a student, I sit in a desk and follow the teacher's lead. GR and AS both cast a set of roles for their constituents to follow that enable their discursive formation of autism to be better comprehended.

GR expands the discourse of autism as acute and thereby creates autism as a journey from diagnosis to recovery. With the discourse centered on a journey, GR positions the user of their website—aimed at the afflicted family—as a new traveler. The user is cast in this role through the structure of the site which offers example journeys. These examples, in a health communication context, function as modeling to build self-efficacy. In other words, this type of modeling provides a map to follow and the self-efficacy of the user in the process (Armitage & Conner, 2000). Enhancing this mapping rhetorical tool is the simple layout outlined above and the straightforward tools offered. These tools include example action plans, checklists, rescue angels, and preventative actions to be followed. The role of the journeyer allows the user to

recollect past journeys. These journeys need not be personal or literal. Instead, the user may rely on either memories of actual journeys or the culturally learned journeys from other sources (e.g. popular culture).

With GR casting its users as new companions on a journey to recovery, they cast themselves as the journey leader. This begins with their own literal leader—the President of the organization Jenny McCarthy. McCarthy has a video introduction to GR, where she retells her journey with son Evan from autistic to recovered—again providing a map to her new followers. In this retelling, her role as the savior, which was discussed in Chapter 4, is clear. The savior role is the ultimate journey leader, as the mythos of Christ is one where Christ leads a lost people to salvation. This mythos extends to Joan of Arc, as she, literally, lead her people to freedom as well. To set up this role, McCarthy begins with the deal she made with God the day Evan was finally diagnosed with autism: “God? If you help me and you show me the way to heal my boy. I promise I’ll teach the world how I did it...I owed it, not only to God, but to the world [to show them how to heal autism].” With this, McCarthy is the savior. We, as the audience, are compelled to identify with her on two primary levels. First, as follows, and second as the savior. As followers we identify with her because we are part of the narrative—the followers. Since the narrative of the savior is so pervasive within American culture (Hughes, 2003), our roles as followers are roles we are probably already used to taking. Whether we take those roles in a religion or via a movie (Butterworth, 2010) or via sports (Mocarski & Billings, 2013), being followers of a savior is always an available role. Since the follower role is always available, the savior role is as well. McCarthy, wisely, recognizes this and gives deference to those who she has followed on her journey—the parents who had been a part of GR and the fight against autism before herself. With this deference, the role of the savior becomes more readily available to the

audience. The audience can then see how every follower becomes a savior and therefore identify with McCarthy. This second role is bolstered by the rescue angels—and allows GR to be self-reproducing as each follower has an opportunity to become a leader in due time, tapping into the American Dream through a social climbing mythos.

The Rescue Angels are parents “who have seen loss of diagnosis or significant improvement through biomedical treatment.” These angels act as GR, and in turn McCarthy, disciples who spread the gospel of GR through their donated time—“giv[ing] guidance and provid[ing] resources for families stating out on their biomedical journey.” The angels allows GR to provide a clear, personal, journey leader to continue the casting of the user as a follower. Furthermore, the angels, through their personal stories and information sheets, provide another map in the modeling seen throughout the website.

Unlike GR, AS spends most of its page space casting the organization itself in the role of credible source. The user’s role is one that shifts from a donor, to a researcher, to the afflicted. Conversely, AS is consistently cast as a source of up-to-date information, which is hardened through the rotating news stories, the research and researcher spotlights, and the plethora of landing spaces to learn more about the latest autism information. In comparison to GR, it seems that, coupled with the puzzle piece logo, the role of the user on AS’s website is that of the explorer sifting through the information. This role is not as embedded within American mythos—although the frontiersman myth does provide a familiar corollary—and is more reminiscent of the academic enterprise of research.

Summation

In sum, AS and GR create alternative histories of autism and, in turn, alternate memories. In AS’s history, autism is chronic and something to be solved; where in GR’s history, autism is

acute and is already solved with a path ready to be taken. The memory created in by AS is one of pain and suffering; while GR's memory is one of joy and a life returned. The two cases of this chapter illustrate how VCA has become sticky. On institutional platforms, those who promote VCA concisely and effectively create templates to follow for those newly-afflicted—or those who believe they may become afflicted. By creating performative echoes and histories that are grounded in American mythos and narratives, the newly inducted do not have to stretch far to become believers. Conversely, the non-VCA subscribers steep their rhetoric in the scientific method: a method that relies on expertise that is further and further from the lay person, as shown in Chapter 4, and also on patience, which is not easily had by those afflicted with a crisis. In the final chapter, the analyses these 6 cases spanning 3-levels of analysis and 6 theoretical lenses will be brought together to offer a concise hypothesis of what makes VCA so sticky. This hypothesis will lead into implications for theories on stickiness, ethos, and health mythologies in general.

CHAPTER 7: IMPLICATIONS

The six case studies of this project demonstrate the wide reach of the *vaccines cause autism* (VCA) myth. VCA is a part of popular culture, the institutions of medicine, government, grass-roots organizations, and non-profit research organizations. Across these realms and situations, VCA accumulates power through its repetition and circulation, solidifying the credibility of its claims. This accumulation echoes Judith Butler's performative theoretical position, and is the basis for the implications this project has for stickiness, as will be discussed in the next section. Furthermore, this project is a comprehensive look at how the rhetoric of science can operate in a poststructuralist world. Specifically, this project demonstrates that with more platforms for deliveries and a wider variety of authors, the rhetoric of science must adapt—studying not only science itself, but also the popular and folk sectors, where science is converted into ethnomedical theories of the everyday, lived world. Before turning to specific theoretical implications, I posit an interpretation and model for how a health myth comes to be and how it builds a community.

The adherence to a health myth involves internalization where the behaviors associated with said myth are believed to be health positive. These behaviors then become performative actions that inculcate the beliefs and attitudes associated with the myth for each myth-subscriber. The moment that a myth is first brought to the attention of a particular individual, that myth is a persuasive agent as rhetoric. Generational passing of a myth is hegemonic in nature and can be folded into the aforementioned theory of performativity through the hegemonically learned behavior. The difference between late adopters and generational adopters is that late adopters

need a cue to action and/or a rhetorical plea to start their own performative citations of the myth, where these citations are inculcated in the generational group. Part of the performative utterance of the myth includes a story of initiation by those who failed to subscribe to the myth before their failure caused them a health harm. This utterance takes the form of a foundational story for the myth that links out to other macro-social narratives and myths which help to ground the myth within other pervasive discourses. The narratives and myths surrounding the health myth are undergird with pathos, which then stick to these narratives and bind the narratives together to bolster the fidelity of the over-arching myth. Furthermore, organizations that seek to profit from the myth (both figuratively and literally) build communities around the myth through the construction of histories that make the myth's adoption easy.

The public understanding of health is influenced by these myths, as the performances associated with the myths chain outward to other surrounding discourses, sticking. In other words, since public forums publish narratives that support health myths (both directly and indirectly through sticky affect—the binding of semiotic meanings through emotive responses) the public understanding of health is encoded by these myths, whether or not the myth is adhered to. The reciprocal effect on these discourses creates hegemonic blocs of meaning. The most important factor seems to be the pathos of each narrative (surrounding and direct) of the myth, mixed with the borrowed logos of these surrounding narratives and discourses.

Mapping this theory onto and across VCA demonstrates this project's development of this theory. VCA's performative actions include the refusal to vaccinate children—these refusals are performative in that they cite previous VCA subscribers each time they are enacted. Furthermore, the performative action is echoed in performative utterances, or instructions/rhetorical pleas, to potential myth subscribers. If this rhetorical plea is generational,

than the plea is silent, enacted through the act of not getting vaccinated, which is central to the ethnomedical worldview of that family or community. In addition to the performative utterance of ardent subscribers, the stories of those afflicted by actions of non-subscription (autism that is claimed to be caused by vaccinations) are passed as foundational narratives. These narratives are tied into macro-social narratives of corporate greed, government corruption, and personal freedom. For freedom, the narrative relies on the belief that a child with autism is a child that has been stolen from his/her parents. Furthermore, since “individuals are subjected to an open-ended, limitless injunction to become happier, freer, and more productive” (Thornton, 2011, p. 405), these foundational stories are part of this neoliberal construction of happiness and freedom. Of course, these foundational narratives are soaked in pathos, where the central figures (the parents) are pitied while their children are mourned. From this place of pity, the parents ascend to become the journey leaders—those who would protect others by starting the performative chain of VCA in the un-afflicted. With a macro-narrative of a journey and a set of followable performatives, the community coheres around their common cause and course.

With each new subscriber the VCA community grows, as does its power. This power echoes across discourses, influencing mainstream understandings autism, vaccinations, childhood, and parenthood. In VCA, the pathos is couched in the fear of a lost childhood. This robbed childhood is counter to neoliberal understandings of childrearing, which are then chained out to the American mythos of liberty and conspiracy. Neoliberal constructions of family replicate the American Dream by grounding family as a discourse of cultural exchange—where a heteronormative family with 2, white, kids and a big house in the suburbs equates to status (Gillies, 2011). A major part of this discourse is about “prioritising [sic] autonomy, choice and democracy,” (Gillies, 2011, p. 7.1) all of which are challenged by a child with autism. The

embedded logic of these myths lend credibility to VCA—bolstering its power and reach. In the coming sections I will unpack the implications this project has for Michel Foucault and critical rhetoric, for the knowledge gap between the lay and scientific community, for narrative analysis, and finally for what I have referred to as affective stickiness. Furthermore, throughout these implications, the way that this project highlights the changing face of ethos is explored.

Foucault and Critical Rhetoric

Clearly, this project is not the first to unite Foucault with critical rhetoric. However, the union in this project is not as prevalent as it could, or I would argue, should be within the rhetorical world. Foucault offers a pathway for rhetoricians within a post-structuralist world to operate. Foucault offers methods—archeology and genealogy in particular—that help to rewrite history. This rewriting is essential to Raymie McKerrow’s charge that modern critics must offer revised artifacts to better understand how power flows and operates. It is not lost on me that McKerrow himself cites Foucault to argue for a critical rhetorical turn: “They are not histories of things, but of the terms, categories, and techniques through which certain things become at certain times the focus of the whole configuration of discussion and procedure” (McKerrow, 1989, p. 108). This project has demonstrated the power of fully immersing an analysis in a Foucauldian method. In the six cases, themes and patterns emerged that show the way that myths can operate as discourses of power—how a myth can be foundational across multiple realms of discourse, uniting these discourses across gaps and barriers and creating a macro-discourse. But these similarities are not central to the implication that Foucault is under-utilized in critical rhetoric.

Instead, where the themes and patterns are not consistent and where there are contradictions between and within realms that is where Foucault becomes a true ally of critical

rhetoric. Kendall Phillips defines Foucauldian discursive formations as “complex set of interrelated discourse, practices, and subject positions that create the conditions for regularity and normalcy, are not as coherent as they may appear” (Phillip, 2012, p. 1). He goes on to explain that it is “contradictions that give rise to new discourses—each of which also presents itself as coherent, complete, and necessary” (Phillip, 2012, p. 2). In this project, the most glaring contradiction in the VCA discursive cluster is the reliance on the biomedical model. Specifically, by employing the biomedical model as the basis for the myth—where there is a single cause to a single disorder—but simultaneously decrying the biomedical world, the discourses of VCA is founded on a contradiction. This contradiction demonstrates Foucault’s power within critical rhetoric, because the genealogy above uncovered this contradiction only through an analysis that used understandings of history and hegemony from Foucault and lenses from critical rhetoric. Furthermore, this contradiction illustrates how power flows—where the strength of the biomedical discourse actually sticks ethos to VCA through VCA’s use of the biomedical model.

It can also be argued that the scientific method is reliant on contradictions as one of its key tenets is that of constant questioning. This questioning leads to debate and conflict, which inevitably leads to contradiction. At the heart of this project is a prime example, as VCA was once a debate in the medical world—and not a controversial one. This debate grew into a contradiction when the argument became *settled* and this is where VCA was born. VCA filled the gap left when the debate was ending, becoming its own discourse. Foucault’s contention that a genealogy creates a “history of the present” (Foucault, 1977, p. 31) is foundational to the course of this project, as this ideal creates a project that looks to the past to find consistency and inconsistency in an effort to better understand today. The analysis of this project demonstrates that much of this work is sifting through unorganized and unrelated (directly) sites of history that

come together as a unified history for contemporary groups. This history then propels movements. In describing how critical work is necessarily political, Phillip's states: "It is the work, as Foucault puts it, of engaging in the present by 'problematizing it [sic] own discursive contemporaneity'" (Phillip, 2012, p. 5). The word contemporaneity here meaning "a sense of participation in discussions about unstructured forms of knowledge" (Badovinac, 2009) makes the interpretation of this charge: a genealogy is a political act as it works to create a counter history of a current discourse. This act is political for both creating the counter history and for calling to attention the fact that there is a history at all. Part of what should make a genealogy so compelling as a method to critical rhetoricians is that it necessarily brings to light that which is hidden. However, unlike Philip Wander's (1984) political notion of the third persona, which gives voice to the silenced, this notion is normally not positive for the target of analysis as those discourses that wish to remain hidden, the seemingly innocuous, are generally oppressive and hegemonic (Mocarski, 2013). VCA is a present discourse, and its problematization in this project has shed light on the way not only health myths operate, but how they bind communities by linking out to macro-narratives, discourses, and myths. Furthermore, this exploration has shown the links between seemingly unrelated situations and discourses, and how they create a discourse that is seemingly innocuous to so many.

Knowledge Gap: Popular Culture as Interpreters

In her analysis of parenting books, Davi Thornton shows that scientists can use the ethos they gain by their degrees and titles to become purveyors of pop-science. This type of journalism would not be necessary if not for the growing gap between the lay and scientific world: "they are authored by scientific experts and framed as translations of neuroscientific truth into accessible guidelines for everyday parenting" (Thornton, 2011, p. 402). This project demonstrates this same

sort of interpretation, with the main interpreter being Jenny McCarthy. McCarthy's celebrity status affords her ethos through a type of parasocial interaction, where the audience feels connected to McCarthy through her many appearances in the media (both before her turn to autism advocacy and after) and therefore more concerned over the health causes she is concerned with (Brown & Basil, 2010). Furthermore, given the fact that she has more platforms available to her than most doctors to share and spread her beliefs, she has more opportunities to create a bond with the public and those seeking information on vaccines and autism.

With the rise in media outlets, information seekers have additional opportunities to find the information that confirms their ethnomedical beliefs—*wrong* or *right*. Furthermore, with the rise in these outlets, celebrities have added platforms to increase their exposure and can enter into co-constructions of their brand through these platforms with their endorsers, thereby solidifying their preferred version of their brand (Mocarski & Billings, 2013). These brands, if tied to health understandings, can then be incorporated as proof of ethnomedical views. In other words, from a social constructionist perspective, brands are co-constructed semiotic understandings: “In postmodern...culture individuals are engaged in a constant task of negotiating meanings from lived and mediated experience” (Elliott & Wattansuwan, 1998, p. 141). Through this lens, brands are dynamic and temporal. Each time a consumer encounters new brand-related information, the construction of that brand is altered. Therefore, each celebrity performance is an opportunity to positively or negatively change a brand in consumers’ minds. McCarthy has tied her brand to her cause (as opposed to a product in a traditional sense): the perpetuation of the health myth VCA. McCarthy’s branding is then tied into the perpetuation of her ethos on the subjects of autism and vaccines, further validating those who adhere to the myths she propagates. With the need for translators from scientific jargon to lay language, a

space has opened for *experts* and purveyors of snake oil posing as experts. These experts do not have to be content experts, as this project demonstrates. Instead, they can champion their expertise through the culling of more common-sense discourses such as parenthood or celebrity.

Implications for Narrative Analysis

This manuscript expands Kevin McClure's (2009) use of identification in the narrative paradigm to include the identification of brands. While this may seem like a small point or something already encompassed by identification at large, I argue that it is, at least, important to note. McClure posits: "narratives provide the basis for 'public shared memories' that function as a 'community's cultural repository,' that narratives remind us of who we are and who we have been, and who we might become" (190). Through shared memory, narratives allow a story to tie people together through their shared identification to parts of the narrative. When adding the additional layer of the author, the paradigm is enhanced. A shift in rhetorical criticism has, I would argue rightly, taken the emphasis of rhetoric away from the author and the author's intent. While ethos is still a vital component of rhetoric, it is somehow divorced from the author; instead, ethos is almost treated like a credential. By using the narrative paradigm to examine the way celebrity brands are tied to public understandings of health, this manuscript reincorporates the author while keeping him/her dead, paradoxically, at the same time. In other words, I argue that the author and their intent *is* vital to the understanding of the meaning system created when that author is a celebrity. This is because that author is already a meaning-system in and of her/himself. Despite this revival of the author, her/his death is still real, it just is now two-fold. The brand is its own meaning system, becoming a text in and of itself and the text being studied is another meaning system. These two meaning systems are symbiotic and therefore any analysis is necessarily intertextual between the produced text and the celebrity as text.

Affective Stickiness

Both practically and theoretically, one of the most important implications of this study is a better understanding of how health myths stick. This is foundational to our future efforts to combat both the effects and spread of health myths that produce public health risks—such as the rise in un-vaccinated children leading to outbreaks of long dormant infectious diseases (CDC, 2012). In answering how signs become sticky, Sarah Ahmed posits that they become sticky by being in close proximity to other sticky signs. Using this understanding of stickiness, we can see how a discourse with sound internal logic, wrapped in relatable emotions and narratives with fidelity, could transfer the stickiness of the discourse onto a myth.

In a further development of her theory of stickiness, Ahmed (2010) states:

“Objects are sticky because they are already attributed as being good or bad, as being the cause of happiness or unhappiness... Groups cohere around a shared orientation toward some things as being good, treating some things and not others as the cause of delight” (2010, p. 35).

In this particular case, VCA became associated with positive emotions because it was fighting the good fight. In other words, the attempt to assuage the fears and complications that autism brings automatically made this attempt at explanation seem *good*, and therefore positive beliefs about this myth accumulated and stuck. This is illustrated plainly by Ahmed (2010) via a negative example: “We apprehend an object as the cause of an affect (a nail becomes known as a pain-cause, which is not the only way we might apprehend a nail)... proximity between an affect and object is preserved through habit” (2010, p. 40). In the VCA case, the object is the vaccine and its proximity to the affect is the onset of autism. Furthermore, the needle injecting the vaccine becomes the nail in this analogy, showing how the negative affect of a sudden-seeming

autism diagnosis is stuck to the pain of the needle penetrating the body of the afflicted child. The latter part of the quote points to a performative understanding of stickiness.

While this project demonstrates that there may be no clear lineage for a health myth, there are many points of entry that are grounded in surrounding discourses. Health myths, at least in this case, fill a space created by the needs inherent in the surrounding discourses. In the case of autism at the individual level a need to stem fear, solve a puzzle, and recapture the *American Dream*; at the medical level a need to understand an exploding incidence rate; and at the institutional level a need for public shaming and fundraising for hope produced the perfect environment for VCA to flourish. Stickiness is related to affect, in that affect allows behaviors to be enacted that normally would not be enacted because affect reduces a person's ability to process rationally. An irrational behavior of another is normally disciplined, in a Foucauldian sense, but if the surveyor is engaged via affect, the discipline fades and is replaced by replication:

“Affect acts as an energy moving between human beings via communicative practices that inspire behavior instinctively. Affect, in the form of something as taken for granted as a gut sense, exerts pressure on our decision making and does not crumble under the deliberative weight of better arguments or more information. As a continuous process linking disparate actions, sensations, and events, affect operates within a transsituational and transhistorical structure and energizes our habituated movements as well as our commonsensical beliefs” (Chaput, 2010, pp. 7-8).

Affect, in this paradigm, allows discourses that would be normally rationally filtered out to transform and stick to the emotions affect enacts. Furthermore, the affect creates a barrier that shields these blocs of behaviors and their discourses from rational scrutiny.

It should be noted, as Phillips articulates, affect and emotion, while related, are not one and the same. Affect is a gut level emotive response that “is a kind of intensity” (Phillip, 2012, p. 4) where emotion is less core, it is filtered. Emotion, in this formulation, is “conventional” and allows for present action to be transformed “into narrativizable actions—reaction circuits, into function and meaning” (citing Massumi 2002; Phillip, 2012, p. 4).

This idea that affect and emotion are separate pervades the affect literature. This separation allows for affect to be indefinable, to be thought of as guttural, and therefore sans logos—and transferable. However, this project challenges this distinction. This challenge is not at the core of the distinction, but at the idea that this presumed boundary between affect and emotion is stable and clearly delineated. Within the analysis, it is clear that affect is a cue to action—driving parents to VCA. The action includes the narrativization of the emotions surrounding each situation: “While affect is distinguished from emotion proper on the grounds that it resists signification and narrativization, it is nonetheless structured—an affective assemblage is a historically and culturally distinctive topography of investments, attentions, and felt obligations” (Thornton, 2011, p. 404). While it may be true that narrativization is of emotion, which, in this case, would be what affect morphs into after time has allowed for perspective, it is not clear that affect is bounded in any temporal way. In other words, affect is not a single reaction to a stimuli never to be had again. Therefore, when narrativizing emotion, affect continually shapes this narrativization and continues the journey down the path toward a set of beliefs and discourses—which, in this case, includes the VCA performatives, rites, and rituals. This project demonstrates that affect pervades all discourses and therefore is often what aids in the sticking of memory and history, even imagined histories and memories that are rooted in nostalgia. In this formulation, the affect of nostalgia and pain help to transcend the present—

affect is what is circulated, it is the goo. As the goo, affect holds VCA together through the past, present, and the future—creating a bloc of stuck discourses that blocks logos, amplifies ethos, and unifies frayed and fragmented discourses.

An illustration of how this may be conceptualized in future scholarship is in the realm of flashbulb memories. Flashbulb memories are those shared memories that are all unique—an example of this is the unique memory each person has of where they were when they heard about the planes crashing into the twin towers on 9/11 (Casey, 2004). Each individual memory is a flashbulb memory that is held together by the unifying temporal event. Flashbulb memories are associated with events that have affective value, and therefore have wide-sweeping social relevancy and therefore currency. This affective value transforms into emotional value overtime through the process of narratization. However, the closer the memory is to the date of narrativized recollection, the more affect the memory has for both the recollector and the recollector's audience. In VCA the flashbulb memory is the story of the day the afflicted received their vaccination. This story has been turned into a narrative, steeped in pathos, but the affective value is transferred to the listener. This value is transferred because the narrative relies on the listener to empathize. With the stickiness of the affective gut punch, VCA is transferred along with the other, more mainstream discourses of lost childhood and parenthood. Interestingly, affect not only works to transmit VCA, but it also builds the ethos of the teller through its transferred energy and the empathy the listener must have.

Summation

In closing, this project has opened up new areas for rhetorical studies and new methods for health communication research. In combining these areas, this project has continued to add nuance to both fields. I hope this project offers more traditional health communication scholars

insights as to why CCR is an important, complimentary lens in a field where questions and problems become more nuanced every day. These cases should demonstrate that medicine is now part of the public domain, and as such, we, as researchers, must study both the problems of health and the contexts in which these problems shift and manifest into ethnomedical worldviews. This is evident through the overall implications and the implications from each individual case. In addition to the implications laid out in this chapter, Chapter 4's cases demonstrated the influence of celebrity through the exploration of Jenny McCarthy. This analysis showed that rhetorical scholars need to find different ways to better understand ethos, as traditional means fall short in a post-structuralist, multi-mediated world. The second case of micro-level continued the development of narrative analysis in critical rhetoric through the multi-generational and multi-source artifact of *Parenting* and *TIME Magazines*. The findings displayed the power of discourses to build cohesive narratives across these generations and sources, as well as the way multiple narratives combine into a greater over-arching narrative that can propel a myth.

In the analysis of the diagnostic history of autism, case 1 of Chapter 5 highlighted how off-hand comments in the early history of a discourse can have lasting and devastating effects. Furthermore, this case showed how the apparatus of the scientific method which the medical world relies on makes discovery a long and contentious process. This length and contention provides opportunities for competing and erroneous (in the eyes of Western medicine) discourses to grow and thrive. The second case of the meso-level provided evidence that *proof* is context and discourse driven, as evident by the manipulation of artifacts to prove opposite sides of the VCA debate. This type of proof manipulation is hidden in plain sight through the employment of generic societal discourses.

The final chapter of analysis began by illustrating one way to utilize Judith Butler's performativity in a rhetorical analysis. In this case, the theater of the Congressional hearings provided an ideal setting to watch citationality at work, as the performers used both intra- and extra-hearing citations. Furthermore, this case showed how many of the macro-social myths and narratives employed in the previous cases were used in conjunction with affect as a way to bolster their rhetorical weight. In the final case of the project and the macro-level, the tracing of memories built by prominent groups on the opposite sides of the VCA debate, demonstrated the ways that memory is really a social construction. Through the lens of memory this case brought together the findings of the previous cases and demonstrated the power of institutions in the crafting of discourses.

This project has shown that health myths function in similar fashion to other myths in that they are built upon multiple forms of rhetoric in multiple areas, held together by affective stickiness. This stickiness is grounded in pathos, but rhetorical buttresses surrounding this pathos are oftentimes logos driven, with any logical fallacies washed away by context or competing, macro-social, discourses. With this in mind, one aspect of a myth that keeps a myth strong is the circulation of this myth. Without sharing the community around the myth dwindles and the myth dies. Circulation, in this case, can come from both myth-deniers and subscribers; the most important element is the sharing itself.

“Just like economic value, rhetorical value is achieved through the circulation of its many transhistorical and transsituational exchanges and just as money measures economic value, affect measures rhetorical value... increase in affective energy of signs results in the habituation of beliefs and behaviors, a habituation that overrides fitting responses, individual interests, and ideological encoding or decoding” (Chaput, 2010, p. 14).

This citation from Catherine Chaput is a fitting coda for this project. With more outlets and opportunities for growth, myths gain value through their accumulative rhetorical power. This power is manifest in circulation across situations, realms, and time. Clearly not all situations and realms of circulation add the same value, but volume trumps sense and like-minded people build volume.

REFERENCES

- Ahmed, S. (2004). *The Cultural Politics of Emotion*. New York: Routledge.
- Ahmed, S. (2010). Happy Objects. In M. Gregg, & G. J. Seigworth (Eds.), *The Affect Theory Reader* (pp. 29-51). Durham, NC: Duke.
- American Psychiatric Association. (2013). *Diagnostic and Statistical Manual of Mental Disorders* (Fifth ed.). Arlington, VA: APA.
- Anderson, M. P., Hooker, B. S., & Herbert, M. R. (2008). Bridging from cells to cognition in autism pathophysiology: biological pathways to defective brain function and plasticity. *American Journal of Biochemistry and Biotechnology*, 4(2), 167.
- Armada, B. J. (1998). Memorial agon: An interpretive tour of the National Civil Rights Museum. *The Southern Journal of Communication*, 63(3), 235-243.
- Armitage, C. J., & Conner, M. (2000). Social cognitive models and health behavior: A structured review. *Psychology & Health*, 15(2), 173-189.
- Autism and Developmental Disabilities Monitoring Network Surveillance Year 2010 Principal Investigators. (2014). *Prevalence of autism spectrum disorder among children aged 8 years-autism and developmental disabilities monitoring network, 11 sites, United States, 2010*. Washington, DC: Morbidity and mortality weekly report. Surveillance summaries.
- Avila-Saavedra, G. (2009). Nothing queer about queer television: Televised construction of gay masculinities. *Media, Culture & Society*, 31(1), 5-21.
- Badovinac, Z. (2009). Contemporaneity as points of connection. *e-Flux*.
- Baio, J. (2012). *Prevalance of Autism Spectrum Disorders--Autism and Developmental Disabilities Monitoring Network, 14 Sites, United States, 2008*. Atlanta, GA: Center for Disease Control and Prevention.
- Baio, J. (2012). *Prevalence of Autism Spectrum Disorders--Autism and Developmental Disabilities Monitoring Network, 14 Sites, United States, 2008*. Washington, DC: Centers for Disease Control and Prevention.
- Barack, L. (2006, August). Spotting Autism Early. *Parenting*, 20(7), p. 35.
- Beach, J. M. (2007). The ideology of the American Dream: Two competing philosophies in education, 1776-2006. *Educational Studies*, 41(2), 148-164.
- Beck, C. S., Aubuchon, S. M., McKenna, T. P., Ruhl, S., & Simmons, N. (2013). Blurring personal health and public priorities: An analysis of celebrity health narratives in the public sphere. *Health Communication*, 1-13.

- Bensaude-Vincent, B. (2001). A genealogy of the increasing gap between science and the public. *Public Understanding of Science, 10*, 99-113.
- Ben-Zeev, D., Young, M. A., & Corrigan, P. W. (2010). DSM-V and the stigma of mental illness. *Journal of Mental Health, 19*(4), 318-327.
- Berger, B. (2005, November). A Journey Toward Hope. *Parenting, 19*(10), pp. 237-238.
- Berger, J. (2001). Buffalo Bill's Wild West and John M. Burke: Exploring the origins of celebrity brand management. *Journal of Promotion Management, 7*(1/2), 225-252.
- Berger, P. L., & Luckmann, T. (1966). *The Social Construction of Reality: A Treatise in the Sociology of Knowledge*. Garden City, NY: Doubleday.
- Black, J. E. (2009). Memories of the Alabama Creek War, 1813-1814. *American Indian Quarterly, 33*(2), 200-229.
- Black, J. E. (2012). Native authenticity, rhetorical circulation, and neocolonial decay: The case of Chief Seattle's controversial speech. *Rhetoric & Public Affairs, 15*(4), 635-646.
- Blair, C., Dickinson, G., & Ott, B. (2010). Introduction: Rhetoric/memory/place. In C. Blair, G. Dickinson, & B. Ott (Eds.), *Places of Public Memory: The Rhetoric of Museums and Memorials* (pp. 1-56). Tuscaloosa, AL: U Alabama P.
- Blaxill, M. F. (2004). What's going on? the question of time trends in autism. *Public Health Reports, 119*(6), 536.
- Blaxill, M. F., Redwood, L., & Bernard, S. (2004). Thimerosal and autism? A plausible hypothesis that should not be dismissed. *Medical Hypotheses, 62*(5), 788-794.
- Bordo, S. (2009). *Unbearable Weight: Feminism, Western Culture, and the Body*. Berkley: U of California P.
- Brennan, R., Eagle, L., & Rice, D. (2010). Medicalization and Marketing. *Journal of Macromarketing, 30*(1), 8-22.
- Brown, A., Sourander, A., Hinkka-Yli-Salomäki, McKeague, I., Sundvall, J., & Surcel, H. (2013). Elevated maternal C-reactive protein and autism in a national birth cohort. *Molecular Psychiatry*.
- Brown, P. (1995). Naming and framing: The social construction of diagnosis and illness. *Journal of Health and Social Behavior, 35*, 34-52.
- Brown, W. (2006). *Regulating Aversion: Tolerance in the Age of Identity and Empire*. Princeton: Princeton UP.
- Brown, W. J., & Basil, M. D. (2010). Parasocial interaction and identification: Social change and processes for effective health interventions. *Health Communication, 25*, 601-602.
- Burbacher, T. M., Shen, D. D., Liberato, N., Grant, K. S., Cernichiari, E., & Clarkson, T. (2005). "Comparison of blood and brain mercury levels in infant monkeys exposed to

- methylmercury or vaccines containing thimerosal. *Environmental Health Perspectives*, 113(8), 1015.
- Burgoon, M., & Hall, J. R. (1994). Myths as health belief systems: The language of salves, socrcery, and science. *Health Communication*, 6(2), 97-115.
- Butler, J. (1990). *Gender trouble: Feminism and the subversion of identity*. New York: Routledge.
- Butler, J. (1993). *Bodies that Matter: On the Discursive Limits of "Sex"*. New York: Routledge.
- Butler, J. (2004). *Undoing Gender*. New York: Routledge.
- Butler, J., & Athanasiou, A. (2013). *Dispossession: The Performative in the Political*. Polity: Malden, MA.
- Butler, S., Mocarski, R., Emmons, B., & Smallwood, R. (2013). Leaving it on the pitch: Hope Solo's negotiation of conflicting gender roles on Dancing with the Stars. *Journal of Gender Studies*, 1-14.
- Butterworth, M. L. (2010). Do you believe in nationalism? American patriotism in Miracle. In H. L. Hundley, & A. C. Billings (Eds.), *Examining Identity in Sports Media* (pp. 133-152). Thousand Oaks, CA: Sage.
- Casey, E. S. (2004). Public Memory in Place and Time. In K. R. Phillips (Ed.), *Framing Public Memory* (pp. 17-44). Tuscaloosa, AL: U Alabama P.
- CDC. (2012, June 26). *Vaccine Safety: Concerns about Autism*. Retrieved from Centers for Disease Control and Prevention: <http://www.cdc.gov/vaccinesafety/concerns/autism/index.html>
- CDC. (2012, November 20). *What would happen if we stopped vaccinations?* Retrieved from Centers for Disease Control and Prevention: <http://www.cdc.gov/vaccines/vac-gen/whatifstop.htm>
- Cettina, T. (2012, October). Should I Label My Kid? *Parenting: Early Years*, pp. 81-84.
- Chaput, C. (2010). Rhetorical circulation in late capitalism: Neoliberalism and the overdetermination of affective energy. *Philosophy and Rhetoric*, 43(1), 1-24.
- Charleston, J. S., Bolender, R. P., Mottet, N. K., Body, R. L., Vahter, M. E., & Burbacher, T. M. (1994). Increases in the number of reactive glia in the visual cortex of Macaca fascicularis following subclinical long-term methyl mercury exposure. *Toxicology and Applied Pharmacology*, 129(2), 196-206.
- Chauhan, A., & Chauhan, V. (2006). Oxidative stress in autism. *Pathophysiology*, 13(3), 171-181.
- Cheny, G. (1983). The rhetoric of identification and the study of organizational communication. *Quarterly Journal of Speech*, 69, 143-158.

- Chomsky, N., & Foucault, M. (1971). Human Nature: Justice versus Power. (F. Elders, Interviewer)
- Christian, L. M., Iams, J., Porter, K., & Glaser, R. (2011). Inflammatory responses to trivalent influenza virus vaccine among pregnant women. *Vaccine*, 29(48), 8982-8987.
- Cline, R. W., & Johnson, S. J. (1992). Mosquitoes, doorknobs, and sneezing: Relationships between homophobia and AIDS mythology among college students. *Health Communication*, 4(4), 273-289.
- Cloud, D. L. (1996). Hegemony or concordance? The rhetoric of tokenism in "Oprah" Winfrsy's rags-to-riches biography. *Critical Studies in Mass Communication*, 13, 115-137.
- Clough, P. T. (2010). The affective turn: Political economy, biomedica, and bodies. In M. Gregg, & G. J. Seigworth (Eds.), *The Affect Theory Reader* (pp. 206-228). Durhmam, NC: Duke UP.
- Coleman, K. (2009). Personal and communal reactions to cancer: An interpretative phenomenological analysis of the beliefs held by Charedi Jewish breast cancer patients. *At the Interface/ Probing the Boundaries*, 55, 75-97.
- Colon, I. (1992). Race, belief in destiny, and seat belt usage: A pilot study. *American Journal of Public Health*, 82(6), 875-877.
- Cooper, B. (2002). Boys Don't Cry and female masculniity: Reclaiming a life & dismantling the politics of normative heterosexuality. *Critical Studies in Media Communication*, 19(1), 44-63.
- Cozma, R. (2009). Online health communication: Source or eliminator of health myths? *Southwest Mass Communication Journal*, Fall, 69-80.
- Croen, L., Grether, J., Hoogstrate, J., & Selvin, S. (2002). The changing prevalence of autism in California. *Journal of Autism and Developmental Disorders*, 32(3), 207-215.
- Crowther, M. R., Green, B. L., & Armstrong, T. D. (2004). African Americans, spirituality, and health: The impact on beliefs, attitudes, and behaviors. In I. L. Livingston (Ed.), *Praeger Handbook of Black American Health: Policies and Issues Behind Disparities in Health* (pp. 555-565). Westport: Praeger.
- Cuklanz, L. M. (2000). Hegemonic Masculinity and Prime Time Rape. In L. M. Cuklanz, *Rape on Prime Time: Television, Masculinity, and Sexual Violence* (pp. 62-98). Philadelphia: U Pennsylvania P.
- Cullen, J. (1998). The needle and the damage done: Research, action research, and the organizational and social construction of health in the 'Information Society'. *Human Relations*, 51(12), 1543-1564.
- Cvetkovich, A. (2003). *An Archive of Feeling: Trauma, Sexuality, and Lesbian Public Cultures*. Durham: Duke UP.

- Davidson, A. I. (1986). Archeology, Genealogy, Ethics. In D. C. Hoy (Ed.), *Foucault: A Critical Reader* (pp. 221-234). 1986: Basil Blackwell.
- DeLonge, G. (2011). A Positive Association found between Autism Prevalence and Childhood. *Journal of Toxicology and Environmental Health*, 74(14), 903-916.
- DeSoto, C., & Hitlan, R. (2007). Blood levels of mercury are related to diagnosis of autism: a reanalysis of an important data set. *Journal of Child Neurology*, 22(11), 1308-1311.
- DeSoto, M. C., & Hitlan, R. T. (2010). Sorting out the spinning of autism: heavy metals and the question of incidence. *Acta Neurobiol Exp (Wars)*, 70(2), 165-176.
- Dolgin, E. E. (2008). *Modernizing Joan of Arc: Conceptions, Costumes, and Canonization*. Jefferson, NC: McFarland & Co.
- Domoff, S. E., Hinman, N. G., Koball, A. M., Storfer-Isser, A., Carhart, V. L., Baik, K. D., et al. (2012). The effects of reality television on weight bias: An examination of The Biggest Loser. *Obesity*, 20(5), 993-998.
- Dórea, J. G. (2011). "Integrating experimental (in vitro and in vivo) neurotoxicity studies of low-dose thimerosal relevant to vaccines. *Neurochemical Research*, 36(6), 927-938.
- Duszczak-Budhathoki, M., Olczak, M., Lehner, M., & Dorota Majewska, M. (2012). Administration of thimerosal to infant rats increases overflow of glutamate and aspartate in the prefrontal cortex: protective role of dehydroepiandrosterone sulfate. *Neurochemical Research*, 37(2), 436-447.
- Dutta, M. J. (2010). The critical cultural turn in health communication: Reflexivity, solidarity, and praxis. *Health Communication*, 25, 534-539.
- Dutta-Bergman, M. (2004). Primary sources of health information: Comparisons in the domain of health attitudes, health cognitions, and health behaviors. *Health Communications*, 16(3), 273-288.
- Eggly, S. (2002). Physician-Patient co-construction of illness narrative in the medical interview. *Health Communication*, 14(3), 339-360.
- Ekman, M. (2012). Understanding accumulation: The relevance of Marx's theory of primitive accumulation in media and communication studies. *Triple C: Cognition, Communication, Co-Operation*, 10(2), 156-170.
- Elliott, R., & Wattansuwan, K. (1998). Brands as symbolic resources for the construction of identity. *International Journal of Advertising*, 17, 131-144.
- Feinberg, D. (2007). Foreward. In J. McCarthy, *Louder than Words: A Mother's Journey in Healing Autism* (pp. ix-xiii). New York: Dutton.
- Finnegan, C. A., & Kang, J. (2004). 'Sighting' the public: Iconoclasm and public sphere theory. *Quarterly Journal of Speech*, 90(4), 377-402.

- Fisher, W. R. (1984). Narrative as a human communication paradigm: The case of public morality argument. *Communication Monographs*, 51, 1-22.
- Fisher, W. R. (1985). The narrative paradigm: An elaboration. *Communication Monographs*, 52, 347-367.
- Foss, S. k. (2004). Fantasy-Theme Criticism. In S. K. Foss, *Rhetorical Criticism: Exploration and Practice* (pp. 109-150). Long Grove, IL: Waveland P.
- Foucault, M. (1965). *Madness and civilization: A history of insanity in the age of reason*. (A. M. Smith, Trans.) New York: Vintage Books.
- Foucault, M. (1972). *The archaeology of knowledge and the discourse of language*. (A. M. Smith, Trans.) New York: Vintage Books.
- Foucault, M. (1972). *The archaeology of knowledge and the discourse of language*. New York: Vintage Books.
- Foucault, M. (1973). *The birth of the clinic: An archaeology of medical perception*. (A. M. Smith, Trans.) New York: Vintage Books.
- Foucault, M. (1977). *Discipline and punish: The birth of the prison*. (A. M. Smith, Trans.) New York: Vintage Books.
- Foucault, M. (1977). *Discipline and punish: The birth of the prison*. New York: Vintage Books.
- Foucault, M. (1978). *History of sexuality: Volume I*. (A. M. Smith, Trans.) New York: Vintage.
- Freed, G. L., Clark, S. J., Butchart, A. T., Singer, D. C., & Davis, M. M. (2011). Identifying and addressing vaccine-safety concerns among parents: Sources and perceived credibility of vaccine-safety information for parents. *Pediatrics*, 127(Supplement), S107-S112.
- Gallagher, C. M., & Goodman, M. S. (2010). Hepatitis B vaccination of male neonates and autism diagnosis, NHIS 1997-2002. *Journal of Toxicology and Environmental Health, Part A*, 73(24), 1665-1677.
- Gallagher, C., & Godman, M. (2008). Hepatitis B triple series vaccine and developmental disability in US children aged 1-9 years. *Toxicological and Environmental Chemistry*, 90(5), 997-1008.
- Gargus, J. J., & Imtaiz, F. (2008). Mitochondrial energy-deficient endophenotype in autism. *American Journal of Biochemistry and Biotechnology*, 4(2), 198.
- Garland, D. (1997). 'Gvernmentality' and the problem of crime: Foucault, criminology, sociology. *Theoretical Criminology*, 1(2), 173-214.
- Geier, D. A., & Geier, M. (2007). A Case Series of Children with Apparent Mercury Toxic Encephalopathies Manifesting with Clinical Symptoms of Regressive Autistic Disorders*. *Journal of Toxicology and Environmental Health, Part A*, 70(10), 837-851.

- Giles, D. C. (2002). Parasocial interaction: A review of the literature and a model for future research. *Mediapsychology*, 4, 279-305.
- Gillies, V. (2011). From function to competence: Engaging with the new politics of family. *Sociological Research Online*, 16(4).
- Gladwell, M. (2000). *The Tipping Point: How Little Things Can Make a Big Difference*. New York: Little, Brown and Co.
- Glanz, K., Rimer, B. K., & Viswanath, K. (Eds.). (2008). *Health Behavior and Health Education: Theory, Research, and Practice*. San Francisco: Jossey-Bass.
- Goehner, A. (2002). My Son. *Time*, 18, p. 55.
- Goehner, A. (2006). The Most Difficult Decision of My Life. *Time*, 167(20), p. 51.
- Gorman, C. (2002). Do Vaccines Cause Autism? *Time*, 160(21), p. 150.
- Gorrindo, P., Lane, C. J., Lee, E. B., McLaughlin, B., & Levitt, P. (2013). Enrichment of elevated plasma F2t-isoprostane levels in individuals with autism who are stratified by presence of gastrointestinal dysfunction. *PloS one*, 8(7).
- Goth, S. R., Chu, R. A., Gregg, J. P., Cherednichenko, G., & Pessah, I. N. (2006). Uncoupling of ATP-mediated calcium signaling and dysregulated IL-6 secretion in dendritic cells by nanomolar Thimerosal. *Environ Health Perspect*, 114, 48.
- Grandin, T. (2002). Myself. *Time*, 18, p. 56.
- Gray, E. (2005). Review: Undoing Gender. *Upping the Anti*, 1.
- Greenberg, J. S. (1978). Health education as freeing. *Health Education*, 9(2), 20-21.
- Greenfeld, K. (2009). How Autism Ages. *Time*, 173(20), pp. 32-36.
- Greenfeld, K. (2010). Who's afraid of Jenny McCarthy? *Time*, 9, pp. 40-45.
- Greenfield, K. (2002). My Brother. *Time*, 18, p. 54.
- Gross, J., & Strom, S. (2007, June 18). Autism Debate Strains a Family and its Charity. *The New York Times*.
- Grosz, E. (1994). *Volatile bodies: Toward a corporeal feminism*. Bloomington: Indiana UP.
- Grosz, E. (2011). *Becoming Undone: Darwinian Reflections on Life, Politics, and Art*. Durham, NC: Duke UP.
- Gupta, V. B. (2004). History, Definition, and Classification of Autistic Spectrum Disorders. In V. B. Gupta (Ed.), *Autistic Spectrum Disorders in Children* (Vol. 12, pp. 1-15). New York: Marcel Dekker, Inc.
- Halbwachs, M. (1992/1941). *On Collective Memory*. (L. A. Coser, Ed., & L. A. Coser, Trans.) Chicago: U Chicago P.

- Hamz, H. (2012). Hepatitis B vaccine induces apoptotic death in Hepa1–6 cells. *Apoptosis*, 17(5), 516-527.
- Harley, D. (1999). Rhetoric and the social construction of sickness and healing. *Social History of Medicine*, 12(3), 407-435.
- Harris, D., & Sancho, M. (2010, June 28). Does positive thinking have the power to cure cancer? *Nightline*.
- Hayden, J. (2009). Chapter 1: Introduction to Theory. In J. Hayden, *Introduction to Health Behavior* (pp. 1-6). Sudbury, MA: Jones & Bartlett.
- Heidt, S. (2012). The presidency as pastiche: Atomization, circulation, and rhetorical instability. *Rhetoric & Public Affairs*, 15(4), 623-633.
- Herbert, M. R. (2005). Large brains in autism: The challenge of pervasive abnormality. *The Neuroscientist*, 11(5), 417-440.
- Herbert, M. R., & Arranga, T. (2006). Interview with Martha Herbert--Autism: A brain disorder, or A disorder that affects the brain? *Meical Veritas*, 3, 1182-1194.
- Hertz-Picciotto, I., & Delwiche, L. (2009). The rise in autism and the role of age at diagnosis. *Epidemiology*, 20(1), 84-90.
- Hewitson, L., Lopresti, B. J., Statt, C., Mason, N. S., & Tomko, J. (2010). Influence of pediatric vaccines on amygdala growth and opioid ligand binding in rhesus macaque infants: A pilot study. *Acta Neurobiologiae Experimentalis*, 70(2), 147-164.
- Hoerner, J. (1999). Scaling the web: A parasocial interaction scale for the world wide web. *Advertising and the World Wide Web*, 99, 135-147.
- Holland, M., Conte, L., Krakow, R., & Colin, L. (2011). Unanswered questions from the Vaccine Injury Compensation Program: a review of compensated cases of vaccine-induced brain injury. *Pace Environmenal Law Review*, 28(2), 11-34.
- Homes, A., Blaxill, M., & Haley, B. (2003). Reduced levels of mercury in first baby haircuts of autistic children. *International Journal of Toxicology*, 22(4), 277-285.
- Horton, D., & Wohl, R. R. (1956). Mass communication and para-social interaction. *Psychiatry*, 19, 263-266.
- Hou, J., & Shim, M. (2010). The role of provider-patient communication and trust in online sources in internet use for health-related activities. *Journal of Health Communication*, 15, 186-199.
- Hoy, D. C. (1986). Introduction. In D. C. Hoy (Ed.), *Foucault: A Critical Reader* (pp. 1-26). New York: Basil Blackwell.
- Hughes, R. T. (2003). *Myths America Lives By*. Urbana: U Illinois P.

- Hughner, R. S., & Kleine, S. S. (2004). Views of health in the lay sector: A compilation and review of how individuals think about health. *Health: An Interdisciplinary Journal for the Social Study of Health, Illness and Medicine*, 8(4), 395-422.
- Hughner, R. S., & Kleine, S. S. (2004). Views of health in the lay sector: A compilation and review of how individuals think about health. *Health: An Interdisciplinary Journal for the Social Study of Health, Illness and Medicine*, 8(4), 395-422.
- Hume, J. (2012). Memory matters: The evolution of scholarship in collective memory and mass communication. *The Review of Communication*, 10(3), 181-196.
- Humphrey, M. L., Cole, M. P., Pendergrass, J. C., & Kiningham, K. K. (2005). Mitochondrial mediated thimerosal-induced apoptosis in a human neuroblastoma cell line (SK-N-SH). *Neurotoxicology*, 26(3), 407-416.
- Hunter, E. P., & Storat, B. (1994). Psychosocial triggers of relapse in persons with chronic mental illnesses: A pilot study. *Issues in Mental Health Nursing*, 15(1), 67-72.
- James, S. H., Cutler, P. C., Melnyk, S., Jernigan, S., Janak, L., Gaylor, D. W., et al. (2004). Metabolic biomarkers of increased oxidative stress and impaired methylation capacity in children with autism. *The American Journal of Clinical Nutrition*, 80(6), 1611-1617.
- James, S. J., Slikker, W., Melnyk, S., New, E., Pogribna, M., & Jernigan, S. (2005). Thimerosal neurotoxicity is associated with glutathione depletion: protection with glutathione precursors. *Neurotoxicology*, 26(1), 1-8.
- Jaroff, L., Blackman, A., McDowell, J., & Park, A. (1999). Vaccine Jitters. *Time*, 154(11), p. 64.
- Just, S. N., & Christiansen, T. J. (2012). Doing diversity: Text-audience agency and rhetorical alternatives. *Communication Theory*, 22(3), 319-337.
- Kammen, M. (1991). *Mystic Chords of Memory: The Transformation of Tradition in American Culture*. New York: Vintage.
- Kawashti, M. I., Amin, O. R., & Rowehey, N. G. (2005). Possible immunological disorders in autism: concomitant autoimmunity and immune tolerance. *The Egyptian Journal of Immunology/Egyptian Association of Immunologist*, 13(1), 99-104.
- Kempuraj, D. A., Zhang, B., Manola, A., Hogan, J., Peterson, E., & Theoharides, T. (2010). Mercury induces inflammatory mediator release from human mast cells. *Journal of Neuroinflammation*, 7(1), 20.
- Kern, J. K., & Jones, A. M. (2006). Evidence of toxicity, oxidative stress, and neuronal insult in autism. *Journal of Toxicology and Environmental Health*, 9(6), 485-499.
- Kertakis, K. D., Franks, P., & Epstein, R. M. (2009). Patient-Centered communication in primary care: Physician and patient gender and gender concordance. *Journal of Women's Health*, 18, 539-545.

- Khan, Z., Combadière, C., Authier, F.-J., Itier, V., Lux, F., Exley, C., et al. (2013). Slow CCL2-dependent translocation of biopersistent particles from muscle to brain. *BMC Medicine*, 11(1), 99.
- King, M. D., & Bearman, P. S. (2011). Socioeconomic status and the increased prevalence of autism in California. *American Sociological Review*, 76(2), 320-346.
- Krans, B. (2003, December 3). Anti-Vaccination movement causes a deadly year in the U.S. *HealthLine*.
- Lancet. (2002). Time to look beyond MMR in autism research. *Lancet*, 359(9307), 637.
- Landry, R. (n.d.). *About*. Retrieved 2014, from The Liberty Beacon: <http://www.thelibertybeacon.com/about/>
- Langford, A., Resnicow, K., & An, L. (2010). Clinical trial awareness among racial/ethnic minorities in HINTS 2007: Sociodemographic, attitudinal, and knowledge correlates. *Journal of Health Communication*, 15, 92-1010.
- Lather, J., & Moyer-Guse, E. (2011). How do we react when our favorite characters are taken away? An examination of a temporary parasocial breakup. *Mass Communication and Society*, 14, 196-215.
- Lin, S. X., Newell, E., & Nelson, C. (2002). Abnormal measles-mumps-rubella antibodies and CNS autoimmunity in children with autism. *Journal of Biomedical Science*, 9(4), 359-364.
- Lumpkins, C. Y. (2012). Hollywood and breast cancer prevention among African American women: An analysis of breast cancer risk narratives in the California 'Every Woman Counts Campaign'. *Journal of Media and Communication Studies*, 4(5), 95-106.
- Lynch, O. H. (2002). Humorous communication: Finding a place for humor in communication research. *Communication Theory*, 12(4), 423-445.
- Manuel-Logan, R. (2012, July 25). Black conspiracy theories 101: HIV/AIDS was created to extinguish Blacks. *News One: For Black America*.
- Marks, J. P., Reed, W., Colby, K., & Ibrahim, S. A. (2004). A culturally competent approach to cancer news and education in an inner city community: Focus group findings. *Journal of Health Communication*, 9, 143-157.
- Marshall, M. (2007). Understanding Autism. *Parenting*, 21(3), p. 37.
- Massumi, B. (2010). The Future Birth of the Affective Fact: The Political Ontology of Threat. In M. Gregg, & G. J. Seigworth (Eds.), *The Affect Theory Reader* (pp. 29-51). Durham, NC: Duke.
- Maxmen, A. (2012). Psychosis risk syndrome excluded from DSM-5. *Nature*.
- McCarthy, C. (2005). On Call Kids' Health. *Parenting*, 19(2), pp. 45-46.

- McCarthy, J. (2007). *Louder than Words: A Mother's Journey in Healing Autism*. New York: Dutton.
- McCarthy, J. (2008). *Mother Warriors: A Nation of Parents Healing Autism Against All Odds*. New York: Dutta.
- McCarthy, J., & Kartzinel, J. (2009). *Healing and Preventing Autism: A Complete Guide*. New York: Dutton.
- McClure, K. (2009). Resurrecting the narative paradigm: Identification and the case of young earth creationism. *Rhetoric Society Quarterly*, 39(2), 189-211.
- McGee, M. C. (1990). Text, context and the fragmentation of contemporary culture. *Western Journal of Communication*, 54, 274-289.
- McKerrow, R. E. (1989). Critical rhetoric: Theory and praxis. *Communication Monographs*, 56, 91-111.
- McWhorter, L. (1999). *Bodies & Pleasures: Foucault and the Politics of Sexual Normalization*. Bloomington: Indiana University Press.
- Meyer, J. C. (2000). Humor as a doublt-edged sword: Four functions of humor in communication. *Communication Theory*, 10(3), 310-331.
- Migdal, C., Foggia, L., Tailhardat, M., Courtellemont, P., Haftek, M., & Serres, M. (2010). Sensitization effect of thimerosal is mediated in vitro via reactive oxygen species and calcium signaling. *Toxicology*, 274(1), 1-9.
- Minami, T., Miyata, E., Sakamoto, Y., Yamazaki, H., & Ichida, S. (2010). "Induction of metallothionein in mouse cerebellum and cerebrum with low-dose thimerosal injection. *Cell Biology and Toxicology*, 26(2), 143-152.
- Mithers, C. L. (2003). Parenting Leaders. *Parenting*, 17(2), pp. 127-133.
- Mocarski, R. (2013). The discourse of the seemingly innocuous: Social media and willing surveillance. *The Electronic Journal of Communciation*, 23(3-4).
- Mocarski, R., & Billings, A. C. (2013). Manufacturing a Messiah: How Nike and LeBron James co-constructed the legend of King James. *Communication & Sport*.
- Molina, V., & Shoenfeld, Y. (2005). Infection, vaccines and other environmental triggers of autoimmunity. *Autoimmunity*, 38(3), 235-245.
- Morris, R. (1997). Myths of sexuality eduation. *Journal of Moral Education*, 26(3), 353-361.
- Nash, J., & Bonesteel, A. (2002). The Geek Syndrome. *Time*, 159(18), p. 50.
- Nash, J., & Bonestell, A. (2002). The secrets of Autism. *Time*, 159(18), p. 46.

- Nataf, R., Skorupka, C., Amet, L., Lam, A., Springbett, A., & Lathe, R. (2006). Porphyrinuria in childhood autistic disorder: Implications for environmental toxicity. *Toxicology and Applied Pharmacology*, 214(2), 99-108.
- Neustadt, J., & Pieczenik, S. (2007). Research Review: Heavy-Metal Toxicity-With Emphasis on Mercury. *Integrative Medicine-Innovation Communications*, 6(2), 26.
- Nora, P. (1989). Between memory and history: Les Liex de Mémoire. *Representations*, 8, 7-24.
- Olczak, M., Duszczyk, M., Mierzejewski, P., & Majewska, M. (2009). "Neonatal administration of a vaccine preservative, thimerosal, produces lasting impairment of nociception and apparent activation of opioid system in rats. *Brain Research*, 1301, 143-151.
- Olczak, M., Duszczyk, M., Mierzejewski, P., Bobrowicz, T., & Majewska, M. D. (2010). Neonatal administration of thimerosal causes persistent changes in mu opioid receptors in the rat brain. *Neurochemical Research*, 35(11), 1840-1847.
- Olczak, M., Duszczyk, M., Mierzejewski, P., Meyza, K., & Majewska, M. D. (2011). Persistent behavioral impairments and alterations of brain dopamine system after early postnatal administration of thimerosal in rats. *Behavioural Brain Research*, 223(1), 107-118.
- Olczak, M., Duszczyk, M., Mierzejewski, P., Wierzba-Bobrowicz, T., & Majewska, M. D. (2010). Lasting neuropathological changes in rat brain after intermittent neonatal administration of thimerosal. *Folia Neuropathol*, 48(4), 258-269.
- Oliveira, G., Ataíde, A., Marques, C., Miguel, T. S., Coutinho, A. M., Mota-Vieira, L., et al. (2007). Epidemiology of autism spectrum disorder in Portugal: prevalence, clinical characterization, and medical conditions. *Developmental Medicine & Child Neurology*, 49(10), 726-733.
- Olson, L. (2009). Pictorial representations of British American resisting rape: Rhetorical re-circulation of a print series portraying the Boston Port Bill of 1774. *Rhetoric & Public Affairs*, 12, 1-36.
- Palmer, R. F., Blanchard, S., & Wood, R. (2009). Proximity to point sources of environmental mercury release as a predictor of autism prevalence. *Health & Place*, 15(1), 18-24.
- Palmer, R. F., Blanchard, S., Stein, Z., Mandell, D., & Miller, C. (2006). Environmental mercury release, special education rates, and autism disorder: an ecological study of Texas. *Health & Place*, 12(2), 203-209.
- Park, A. (2008). How Safe are Vaccines? *Time*, 22, pp. 36-41.
- Petrik, M. S., Wong, M. C., Tabata, R. C., Garry, R. F., & Shaw, C. A. (2007). Aluminum adjuvant linked to Gulf War illness induces motor neuron death in mice. *NeuroMolecular Medicine*, 9(1), 83-100.
- Phillip, K. R. (2012). Affective seams in the discourses of the present. *Critical Studies in Media Communication*, 29(1), 1-6.

- Phillips, K. R. (2002). Spaces of invention: Dissension, freedom, and thought in Foucault. *Philosophy and Rhetoric*, 35(4), 328-344.
- Phillipson, A. (2013). Re-Reading 'lipoliteracy': Putting emotions to work in fat studies scholarship. *Fat Studies*, 2, 70-86.
- Poling, J. S., Frye, R. E., Shoffner, J., & Zimmerman, A. W. (2006). Developmental regression and mitochondrial dysfunction in a child with autism. *Journal of Child Neurology*, 21(2), 170-172.
- Porter, G. (2010). Work ethic and ethical work: Distortions in the American Dream. *Journal of Business Ethics*, 96, 535-550.
- Purvis, T., & Hunt, A. (1993). Discourse, ideology, discourse, ideology, discourse, ideology... *The British Journal of Sociology*, 44(3), 473-499.
- Ratajczak, H. V. (2011). Theoretical aspects of autism: Causes-A review. *Journal of Immunotoxicology*, 8(1), 68-79.
- Reverby, S. M. (2001). More than fact and fiction: Cultural memory and the Tuskegee syphilis study. *Hastings Center Report*, 31(Part 5), 22-28.
- Richey, S. W. (2003). *Joan of Arc: The Warrior Saint*. Westport, CT: Praeger.
- Rideout, V. J. (2008). *Television as a health educator: A case study of Grey's Anatomy*. Henry J. Kaiser Family Foundation.
- Rimland, B., & McGinnis, W. (2002). Vaccines and autism. *Lab Med*, 33, 708-716.
- Rossignol, D. A., & Bradstreet, J. J. (2008). Evidence of mitochondrial dysfunction in autism and implications for treatment. *American Journal of Biochemistry and Biotechnology*, 4(2), 208.
- Rossignol, D. A., & Frye, R. E. (2011). Mitochondrial dysfunction in autism spectrum disorders: a systematic review and meta-analysis. *Molecular Psychiatry*, 17(3), 290-314.
- Rosteck, T. (1999). Introduction: Approaching the Intersection: Issues of Identity, Politics, and Critical Practice. In T. Rosteck (Ed.), *At the Intersection: Cultural Studies and Rhetorical Studies* (pp. 1-23). New York: The Guilford P.
- Roth, M. S. (1981). Foucault's 'History of the Present'. *History & Theory*, 20(1), 32-46.
- Rushing, J. H. (1986). Mythic evolution of 'The New Frontier' in mass mediated rhetoric. *Critical Studies in Mass Communication*, 3(3), 265-297.
- Rushing, J. H., & Frenzt, T. S. (1989). The Frankenstein myth in contemporary cinema. *Critical Studies in Media Communication*, 6, 61-80.
- Saha, S., Jacobs, E. A., Moore, R. D., & Beach, M. C. (2010). Trust in physicians and racial disparities in HIV care. *AIDS Patient Care and STDs*, 24(7), 415-420.

- Sajdel-Sulkowska, E. M., Windom, H., Audhya, T., & McGinnis, W. (2008). Oxidative stress in autism: elevated cerebellar 3-nitrotyrosine levels. *American Journal of Biochemistry and Biotechnology*, 4(2), 73.
- Schulz, J. B., Lindenau, J., Seyfried, J., & Dichgans, J. (2000). Glutathione, oxidative stress and neurodegeneration. *European Journal of Biochemistry*, 267(16), 4904-4911.
- Seneff, S., Davidson, R. M., & Liu, J. (2012). Empirical data confirm autism symptoms related to aluminum and acetaminophen exposure. *Entropy*, 14(11), 2227-2253.
- Shandley, K., & Austin, D. W. (2011). Ancestry of pink disease (infantile acrodynia) identified as a risk factor for autism spectrum disorders. *Journal of Toxicology and Environmental Health, Part A*, 74(18), 1185-1194.
- Sharpe, M. A., Gist, T. L., & Baskin, D. S. (2013). B-Lymphocytes from a population of children with Autism Spectrum Disorder and their unaffected siblings exhibiting hypersensitivity to Thimerosal. *Journal of Toxicology*.
- Sherif, M., & Sherif, C. W. (1968). Attitudes as the Individual's Own Categories: The Social Judgment-Involvement Approach to Attitude and Attitude Change. In C. W. Sherif, & M. Sherif (Eds.), *Attitude, Ego-Involvement, and Change* (pp. 105-139). New York: Wiley.
- Silk, M. L., Francombe, J., & Bachelor, F. (2009). The Biggest Loser: The discursive constitution of fatness. *Interactions: Studies in Communication and Culture*, 1(1), 369-389.
- Singh, V. K., Lin, S. X., & Yang, V. (1998). Serological association of measles virus and human herpesvirus-6 with brain autoantibodies in autism. *Clinical Immunology and Immunopathology*, 89(1), 105-108.
- Staff. (1969). The Trance Children. *Time*, 94(5), p. 66.
- Staff. (2007, November 12). Finding and Fighting Autism. *Time*, 170(20), pp. 16-17.
- Staff. (2011, September). Doc Talk: Offspring. *Parenting: Early Years*, p. 32.
- Staff, T. (2013, May 29). 40 Infallible Reasons Why You Should Not Vaccinate Infants. *The Liberty Beacon*.
- Staff, T. (2013, May 8). Autism Groups Demand Action in Light of New CDC Statistics. *The Liberty Beacon*.
- Staff, T. (2013, August 12). Courts Quietly Confirm MMR Vaccine Causes Autism. *The Liberty Beacon*.
- Staff, T. (2013, June 19). *Fourteen Studies: Our Studies (Vaccine Studies the Govt. wont show you)*. Retrieved 2014, from The Liberty Beacon: <http://www.thelibertybeacon.com/2013/06/19/fourteen-studies-our-studies-vaccine-studies-the-govt-wont-show-you/>

- Staff, T. (2013, June 21). New Published Study Verifies Andrew Wakefield's Research on Autism -- Again (MMR Vaccine Causes Autism). *The Liberty Beacon*.
- Stormer, N. (2013). Recursivity: A working paper on rhetoric and mnesis. *Quarterly Journal of Speech*, 99(1), 27-50.
- Stuckey, M. E. (2012). On rhetorical circulation. *Rhetoric & Public Affairs*, 15(4), 609-612.
- Sturken, M. (1997). *Tangled memories: The Vietnam war, the AIDS epidemic, and the politics of remembering*. Berkley, CA: U California P.
- Sulkowski, Z. L., Chen, T., Midha, S., Zavacki, A. M., & Sajdel-Sulkowska, E. (2012). Maternal thimerosal exposure results in aberrant cerebellar oxidative stress, thyroid hormone metabolism, and motor behavior in rat pups; sex-and strain-dependent effects. *The Cerebellum*, 11(2), 575-586.
- Sutton, D. (1997). On mythic criticism: A proposed compromise. *Communication Reports*, 10, 211-217.
- Syme, A. L. (2004). Social determinants of health: The community as an empowered partner. *Preventing Chronic Disease: Public Health Research, Practice, and Policy*, 1(1), 1-5.
- Task Force on Nomenclature and Statistics of the American Psychiatric Association. (1980). *DSM-III: Diagnostic and Statistical Manual of Mental Disorders*. Washington, DC: American Psychiatric Association.
- The Association of Magazine Media. (2012). *Circulation Trends & Data*. New York: The Association of Magazine Media.
- The Committee on Nomenclature and Statistics of the American Psychiatric Association. (1952). *Diagnostic and Statistical Manual: Mental Disorders*. Washington, DC: American Psychiatric Association.
- Thornton, D. J. (2011). Neuroscience, affect, and the entrepreneurialization of motherhood. *Communication and Critical/Cultural Studies*, 8(4), 399-424.
- Thrift, N. (2010). Understanding the material practices of glamour. In M. Gregg, & G. J. Seigworth (Eds.), *The Affect Theory Reader* (pp. 289-308). Durham, NC: Duke UP.
- Tomljenovic, L., & Shaw, C. A. (2011). Do aluminum vaccine adjuvants contribute to the rising prevalence of autism? *Journal of Inorganic Biochemistry*, 105(11), 1489-1499.
- Tonn, M. B. (1996). Militant motherhood: Labor's Mary Harris "Mother" Jones. *Quarterly Journal of Speech*, 82(1), 1-21.
- Trimble, S. (2010). (White) rage: Affect, neoliberalism, and the family in 28 Days Later and 28 Weeks Later. *The Review of Education, Pedagogy, and Cultural Studies*, 32, 295-322.
- Tsouderos, T., & Callahan, P. (2009, November 23). Autism treatment: Science hijacked to support alternative therapy: Researchers' fears about misuse of their work come true. *Chicago Tribune*.

- Vaccine Facts. (n.d.). Dr. Paul Offit Misinforms and Fabricates the Truth on the Dangers of the Anti-Vaccine [Vaccine Pro Truth] Movement. *Vaccine Facts*.
- Vaccine Facts. (n.d.). The Mechanisms of Vaccine Injury and Via Cytokine Storm. *Vaccine Facts*.
- Vargas, D. L., Nascimbene, C., Krishnan, C., Zimmerman, A. W., & Pardo, C. A. (2005). Neuroglial activation and neuroinflammation in the brain of patients with autism. *Annals of Neurology*, 57(1), 67-81.
- Wade, D. T., & Halligan, P. W. (2004). Do biomedical models of illness make for good healthcare systems? *British Medical Journals*, 329(7479), 1398-1401.
- Wakefield, A. J., Murch, S. H., Anthony, A., Linnell, J., Casson, D. M., Malik, M., et al. (1998). Ileal-lymphoid-nodular hyperplasia, non-specific colitis, and pervasive developmental disorder in children. *The Lancet*, 351(9103).
- Wakefield, A. J., Murch, S. H., Anthony, A., Linnell, J., Casson, D. M., Malik, M., et al. (1998). Ileal-lymphoid-nodular hyperplasia, non-specific colitis, and pervasive developmental disorder in children. *The Lancet*, 351(9103), 637-641.
- Walker, S. J., Segal, J., & Aschner, M. (2006). Cultured lymphocytes from autistic children and non-autistic siblings up-regulate heat shock protein RNA in response to thimerosal challenge. *Neurotoxicology*, 27(5), 685-692.
- Wallis, C. (2007). What Autism Epidemic? *Time*, 169(4), p. 69.
- Wallis, C. (2010, February 15). Debunked. *Time*, 175(6), p. 18.
- Wallis, C., & Cray, D. (2006). Inside the Autistic Mind. *Time*, 20, pp. 42-48.
- Wallis, C., & Goehner, A. (2006). A Tale of Two Schools. *Time*, 20, pp. 48-51.
- Wallis, C., & Park, A. (2006). Blame it on Teletubbies. *Time*, 16, p. 65.
- Waly, M., Olteanu, H., Banerjee, R., Choi, S. W., Mason, J. B., Parker, B. S., et al. (2004). Activation of methionine synthase by insulin-like growth factor-1 and dopamine: A target for neurodevelopmental toxins and thimerosal. *Molecular Psychiatry*, 9(4), 358-370.
- Walzer, M. (1986). The Politics of Michel Foucault. In D. C. Hoy (Ed.), *Foucault: A Critical Reader* (pp. 51-68). New York: Basil Blackwell.
- Wander, P. (1984). The third persona: An ideological turn in rhetorical theory. *Central States Speech Journal*, 35, 197-215.
- Warner, M. (1991). Introduction: Fear of a queer planet. *Social Text*, 29, 3-17.
- Warner, M. (1991). Introduction: Fear of a queer planet. *Social Text*, 29, 3-17.
- Warner, M. (2005). *Publics and Counterpublics*. New York: Zone Books.

- Warner, M. (2013). *Joan of Arc: The Image of Female Heroism*. Oxford: Oxford UP.
- Weiner, R. (2011, September 13). Bachmann claims HPV vaccine might cause 'mental retardation'. *The Washington Post*.
- Weiss, D. (2005). Constructing the queer "I": Performativity, citationality, and desire in Queer Eye for the Straight Guy. *Popular Communication*, 3(2), 73-95.
- Werner, E., & Dawson, G. (2005). Validation of the phenomenon of autistic regression using home videotapes. *Archives of General Psychiatry*, 62(8), 889.
- Wildes, K. (2001). The crisis of medicine: Philosophy and the social construction of medicine. *Kennedy Institute of Ethics Journal*, 11(1), 71-86.
- Williamson, L. (2010). Bush's mythic America: A Critique of the rhetoric of war. *Southern Journal of Communication*, 75(3), 215-231.
- Wilson, K., Hawken, S., Kwong, J., Deeks, S., Crowcroft, N., Van Walraven, C., et al. (2011). Adverse events following 12 and 18 month vaccinations: a population-based, self-controlled case series analysis. *PloS one*, 6(12).
- Windham, G. C., Zhang, L., Gunier, R., Croen, L., & Grether, J. (2006). Autism spectrum disorders in relation to distribution of hazardous air pollutants in the San Francisco Bay area. *Environmental Health Perspectives*, 114(9), 1438.
- Wingfield, A. H. (2010, October 07). *Did the government invent AIDS to kill black people?* Retrieved October 8, 2012, from Racism Review: <http://www.racismreview.com/blog/2010/10/07/did-the-government-invent-aids-to-kill-black-people/>
- Wolfe, R. M., & Sharp, L. K. (2002). Anti-vaccinationist past and present. *British Medical Journal*, 325(7361), 430-432.
- Wolff, S. (2004). The history of autism. *European Child & Adolescent Psychiatry*, 13(4), 201-207.
- Woods, J. S., Armel, S. E., Fulton, D. I., Allen, J., Wessels, K., Simmonds, P. L., et al. (2010). Urinary porphyrin excretion in neurotypical and autistic children. *Environmental Health Perspectives*, 118(10), 1450.
- Wright, K. (2014, January 8). Katie Wright on Autism Speaks' Science Department: A Year in Review. *Age of Autism: Daily Web Newspaper of the Autism Epidemic*.
- Yang, L. H., Wonpat-Borja, A. J., Opler, M. G., & Corcoran, C. M. (2010). Potential stigma associated with inclusion of the psychosis risk syndrome in the DSM-V: An empirical question. *Schizophrenia Research*, 120(1-3), 42-48.
- Yel, L., Brown, L., Su, K., Gollapudi, S., & Gupta, S. (2005). "Thimerosal induces neuronal cell apoptosis by causing cytochrome c and apoptosis-inducing factor release from mitochondria. *International Journal of Molecular Medicine*, 16(6), 971.

Young, H., Geier, D. A., & Geier, M. R. (2008). Thimerosal exposure in infants and neurodevelopmental disorders: an assessment of computerized medical records in the Vaccine Safety Datalink. *Journal of Neurological Sciences*, 271(1), 110-118.

Zelizer, B. (1995). Reading the past against the grain: The shape of memory studies. *Critical Studies in Mass Communication*, 12(2), 214-239.

Zhang, Y., Xu, Q., Li, S.-c., & Xu, X. (2012). Risk Factors for Autistic Regression Results of an Ambispective Cohort Study. *Journal of Child Neurology*, 27(8), 975-981.