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THE FOOD BABE FEARMONGER:

TRANSCENDING SPHERES OF ARGUMENT THROUGH THE DUAL USE OF PERSONAL AND PSEUDO-TECHNICAL EXPERTISE

An Abstract of a Thesis

Submitted

in Partial Fulfillment

of the Requirements for the Degree

Master of Arts

Abigail Shew

University of Northern Iowa

July 2018

ABSTRACT

This thesis examines the public figure Vani Hari, aka The Food Babe, and her influence on public dialogue about food, nutrition, and diet. Using the theoretical framework of spheres of argument as originally described by G. Thomas Goodnight, this thesis analyzes Food Babe as an expert within the personal, technical, and public spheres. Both verbal and visual arguments will be considered throughout the analysis of Food Babe as both a personal sphere rhetor and pseudo-technical expert. This thesis argues that Food Babe simultaneously uses personal sphere evidence and argumentative strategies to legitimize herself as a pseudo-technical expert within the technical sphere, and uses technical or scientific evidence to establish herself as a maternal expert within the personal sphere. The conclusion of this thesis expands on Goodnight's original theorization of the spheres of argument and argues that the three spheres as originally described are insufficient for understanding the rhetorical function of public figures like Food Babe.

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Date

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has been approved a	s meeting the thesis requirement for the
Degree of Master of	Arts
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TABLE OF CONTENTS

	PAGE
LIST OF FIGURES	V
CHAPTER 1. AN INTRODUCTION TO FOOD BABE	1
CHAPTER 2. LITERATURE REVIEW	11
CHAPTER 3. FOOD BABE IN THE PERSONAL SPHERE	37
CHAPTER 4. FOOD BABE AS A PSEUDO-TECHNICAL EXPERT	62
CHAPTER 5. BEYOND SPHERES OF ARGUMENT	91
REFERENCES	107

LIST OF FIGURES

FIGURE		PAGE
1	Hari and Family	44
2	Hari's Daughter	46
3	Child and Smoothie	47
4	Hari at the Gym	48
5	Hari at the Beach	48
6	Let Food Be Thy Medicine	50
7	Comment Re-Post	57
8	Original Photo (with comment)	57
9	GMO Meme Images	72
1	0 Marshmallow Mayhem	76
1	1 Go-Gurt Ingredients Label	78
1	2 Don't Poison Santa	80
1	3 Dissecting In-N-Out	82
1	4 Dissecting Carl's Jr	83
1	5 Subway and Azodicarbonamide	84
1	6 Food Allergies	86
1	7 What Additive?	88

CHAPTER 1

AN INTRODUCTION TO FOOD BABE

Vani Hari, better known as The Food Babe, gained internet fame in 2011 when she used her newly-formed blog to successfully petition Chick-fil-A to remove the preservative tertiary butylhydroquinone (TBHQ) from their chicken (Storm, 2013).

Following her success with Chick-fil-A, Hari petitioned Subway to remove the coloring agent azodicarbonamide (ADA) from their bread and Kraft Foods to remove yellow dye from its macaroni and cheese products. Both of these campaigns were successful (Storm, 2013). She then worked with Chipotle to ensure they use exclusively non-GMO products. She also takes credit for the change in Starbucks's pumpkin spice latte recipe to include real pumpkin rather than pumpkin flavoring, although Starbucks does not give Hari credit for the changed recipe (Kim, 2015).

Hari's blog, foodbabe.com, was originally formed in April 2011 as a way for Hari to "share [her] healthy lifestyle with family and friends" (Hari, 2018c). Since then, the blog has expanded to include not only recommendations for how to lead a generally healthy lifestyle, but also numerous anti-corporate petitions, lists of what processed food ingredients to avoid, explanations about the dangers of GMOs and factory farming, and links to numerous products to buy.

Following the success of these campaigns and her blog, in 2015 Hari released her book, *The Food Babe Way*, which reached #4 on the *New York Times* Bestseller list and remained in that spot for four weeks (Wilson, 2015). Her book promised readers a way

to "break free from the hidden toxins in your food and lose weight, look years younger, and get healthy in just 21 days" (Hari, 2015, book cover). The first three chapters of her book were dedicated to finding out the truth about the chemicals in processed food products. The book included a list of fifteen chemicals that Food Babe claimed should be universally avoided, including all antibiotics (p. 41), pesticides (p. 42), and preservatives (p. 48). She went on to tell her readers that the only way to be sure you are avoiding all of the "sickening 15" (p. 38) is to eat only non-GMO, organic, homemade food products.

Despite the fact that the back cover description of her book included the phrase "feel good without . . . having to be on a diet" (Hari, 2015), the larger half of her *Food Babe Way* book consisted of a 21-day diet plan that will help readers "lose weight, look years younger, and get healthy in just 21 days" (Hari, 2015, book cover). This diet plan included recipes, product recommendations, and a list of "good food and good habits" (p. 77) that all readers should follow. She included a short three to four-page chapter for each of the 21 days in her diet plan, and for each day she describes not only the foods one should be eating, but also habits to be following. Her recommended habits included things like not drinking any fluids (including water) while eating (Day 3 – Stop Drinking Fluids With Meals, p. 96), avoiding genetically modified ingredients (Day 15 – Know Thy GMOs!, p. 216), and fasting for at least twelve hours a day (Day 20 – Fast Every Day, p. 266). She also included a list of recipes and a day-by-day meal plan for the entire 21-day diet program. She concluded the book with a chart of how much money various

corporations have spent in lobbying efforts against labeling of genetically modified ingredients (Appendix 3).

In both her blog and book, Hari has never described herself as a scientist. She claims that she is simply a concerned citizen and activist who is "hot on the trail to investigate what's really in your food" (Hari, 2018b). In the introductory chapter of her book, as well as on her website's "about" page, Hari has stated that she used to be "fat and sick" (Hari, 2015, p. 61). She claimed that, for most of her life, she ate whatever she wanted, mostly fast foods, and "looked nothing like a babe" (Hari, 2015, my story). She claimed that after becoming very sick, she altered everything about her eating habits and was forever changed. Not only did she lose weight after following her own diet plan, but she became healthier after following her own advice of "let food be thy medicine" (Hari, 2018c). She used this transformation from "fat and sick" to "babe" to show her followers that her *Food Babe Way* really does work.

Hari uses her social media pages on Facebook, Twitter, and Instagram to promote her book, blog, and Food Babe lifestyle, as well as to provide recipes and shopping tips to her followers, whom she refers to as the "Food Babe Army" (Hari, 2018). Her posts generally take one of four forms: photos of herself or her children, recipes with product recommendations, images of food labels with certain ingredients highlighted as problematic, or memes. The photos of her children are usually associated with a caption about how to achieve healthy lifestyles for children, and they are almost always accompanied by a link to a blog post or her book. The photos Hari posts of

herself are also usually associated with an external blog post, but are typically focused on weight loss or beauty as opposed to overall health. The recipes she posts are always accompanied by links to non-GMO or organic food products, many of which sponsor Hari (Godoy, 2014). When she posts food labels, the ingredients she highlights are usually things like preservatives or other chemical additives. She generally provides little or no description of why these ingredients are dangerous, and relies heavily on the word "chemicals" as being innately problematic. Finally, the memes she posts are almost always targeted at Monsanto, genetically modified foods (GMOs), or organic farmers. Though her activism overall is fairly broad, her memes are all specifically targeted, and are usually associated with little or no text descriptions.

In addition to monetizing her social media presence through corporate sponsorship and product endorsement, in 2018, Hari released her own food and supplements line, Truvani. The mission statement of the company suggests its goal is to provide "real food without added chemicals. Products without toxins. Labels without lies" (Hari, 2018d). To date, the line only contains two products: a daily turmeric supplement tablet and organic chicken bone broth powder. Both of these products are labeled as non-GMO and are USDA certified organic. Both sold out within days of their initial release.

Understanding the rhetorical presence and significance of Food Babe requires an understanding of how she operates in all of these diffused locations. Vani Hari does not become *Food Babe* without the influence of her social media accounts, book, corporate

petitions, and new Truvani brand. Understanding how each of these presences shapes the rhetorical figure of Food Babe is essential. Though it is the case that Food Babe herself is a single person, the diffuse texts that shape her are all equally important in understanding who she is and how she functions rhetorically.

Responses to Food Babe

Upon first look, not much about Food Babe seems problematic. What could be wrong with encouraging a healthy lifestyle and holding food companies accountable to their customers? Unfortunately, little of what Hari promotes is scientifically accurate. Hari herself is not a scientist, and although she has collaborated with a few scientists and medical professionals, most of what she promotes is solely based on her own personal experiences of dieting and weight loss.

More importantly, though, Hari has been accused by top food scientists of misleading the public about scientific data and has been called a "fearmonger" (Godoy, 2014). Kavin Senapathy (2015), one of the authors of *The Fear Babe: Shattering Vani Hari's Glass House*, claimed that Hari operates by exploiting the fears of her followers to get them to buy her book or any one of her numerous detox programs. *The Fear Babe* systematically addressed each of the points in Food Babe's book, and cited numerous scientific studies including a comprehensive 2016 report by the National Academy of Sciences that concludes that GMOs are nearly universally safe for human consumption and carry no long-term health risks. This is important because topics about genetic modification and food technology are the places, both in her blog and book, where Hari

comes the closest to sounding like an actual scientist. These are the only chapters in her book that she cites scientific research (though, many of the studies she cites have been disproven upon further research) and are the only places on her social media accounts that she ever links to sites other than her own personal blog. Though her campaigns more frequently focus on chemical additives and ingredients, such posts on her blog and social media sites rarely, if ever, include any citations or links to scientific studies.

Additionally, Dr. Kevin Folta, a horticulturist at the University of Florida, claimed that not only does Hari conflate scientific and pseudoscientific claims in an effort to gain followers, but that some of her dietary recommendations have the potential to be dangerous, especially for children (Storm, 2015). Dr. John Coupland, food scientist at Pennsylvania State University, added to this by claiming that Hari's activism is not only dangerous in terms of individual health, but it is also a distraction from larger issues with the food industry such as food waste, marketing to children, and climate change.

Food Babe has sparked the creation of a number of parody accounts including Science Babe, Math Babe, Food Hunk, SciBabe (not to be confused with Science Babe), and Chow Babe, each of which tackle various aspects of Hari's activism. Most of these accounts function very similarly to Food Babe's own Facebook page, posting memes and links to blog posts that debunk Hari's pseudoscience. Interestingly, many of these parody accounts (with the exception of Science and Math Babes) are not scientists. Much like Hari herself, they are concerned parents or consumers in search of the truth about food products. They just usually fall closer to actual food science than Hari does.

Hari has never responded to any of these critics. Across all of her numerous social media accounts, in her book, on her blog, or in interviews, Hari has never even acknowledged that people have responded to her. She almost never engages with people who share her posts on Facebook or Twitter, and she has never said anything about *The Fear Babe* book that was released as a response to her 2015 *Food Babe Way* book. She also has never responded to fact-checks, studies, or any scientific questions. The only time she has engaged with followers is when they compliment her in some way, when they ask for specific product recommendations, or when they ask her to join a cause.

Despite rarely engaging with her followers, Hari has developed a massive social media following. Her Food Babe Facebook page has over 1.2 million likes since she started the page in March of 2013, and her Twitter and Instagram accounts both have over 100,000 followers. These factors led to her being named one of *Time*'s Most Influential People on the Internet in 2015. *Time* (2015) cited the 54 million visits to her website in 2015 alone, as well as the thousands of signatures she received on her petition to Kraft Foods, as evidence of her success and influence. Although scientific experts frequently oppose her claims, Hari has become a prominent and important part of public discourse around food.

Research Questions

Why are people so willing to believe Hari that GMOs and chemicals are dangerous, and gluten is poison, when so many food scientists and activists have

disproven her claims? In an effort to describe how Food Babe has gained such a massive following despite the fact that she is not a scientist, has no technical training in food science, and never cites verified scientific studies, I address the following two research questions throughout this thesis:

RQ1: How does Food Babe position herself as an expert in both the technical and personal spheres?

RQ2: How does Food Babe use visual arguments to strengthen her positions within the technical and personal spheres?

To explain why Hari has become so persuasive despite being contradicted by scientific evidence, I first begin with an explanation of the three spheres of argument, as originally described by Goodnight in 1982. By describing how Hari has established herself as a technical expert despite the fact that she rarely employs any scientific or technical evidence, I can begin to explain how and why she has gained such a following. I also describe how Hari functions within the personal sphere of argumentation and how such a rhetorical position allows her to make claims that true technical experts are not generally able to make. Finally, I discuss the use of visual argument by both Hari and her followers in an attempt to understand the power of Hari's persuasive strategies and why it has been nearly impossible for anyone to argue with her.

In Chapter 2, I begin answering these questions by completing a literature review about spheres of argument; translation between the technical, personal, and public spheres; manufacturing of scientific controversy; networked public dialogue; and visual

argument. By reviewing the existing literature, I both develop a theoretical framework with which to better understand the role of Food Babe, as well as identify existing gaps in the literature that I later address in Chapter 5. In Chapter 3, I analyze Food Babe as a personal sphere expert. Through an examination of her use of maternal expertise, I argue that she is able to establish herself as a credible activist because she is beautiful, healthy, and a successful mother.

In Chapter 4, I argue that she uses this rhetorical position to make largely unsubstantiated claims about food science and establish herself as a pseudo-technical expert through the use of scientific terms, but not scientific evidence. In this chapter I will define the new term pseudo-technical expert to describe Food Babe's unique rhetorical position within the technical sphere. I will contrast this term both with traditional understandings of technical expertise as well as with Goodnight's 2012 description of amateur technical enthusiasm, which he described as a problem of encroachment into public dialogue.

Throughout both Chapters 3 and 4, I analyze Food Babe's use of visuals on her social media accounts to determine how she is able to establish herself as both a personal and pseudo-technical expert. Though Food Babe posts images across all of her social media accounts, including Facebook, Twitter, Instagram, and Pinterest, my focus is on the images and captions she posts on Facebook. I choose this focus for a few reasons. First, out of all of her social media platforms, Food Babe by far has the most followers on her Facebook page. As of April 2018, she has over 1.2 million followers on

her Facebook account, compared with only 106,000 on her Twitter and 182,000 on Instagram. Additionally, the posts she shares to all of her accounts almost always originate on Facebook, so it makes sense to analyze them on that platform. Finally, her posts on Facebook always receive more attention in terms of shares, likes, and comments than they do on any other platform.

Following this analysis of Food Babe's social media presence, I discuss the attempts of critics to respond to Food Babe, and the general lack of direct engagement between Hari and her opponents. Finally, in Chapter 5, I argue that Food Babe's rhetorical position is a unique one that was unanticipated by Goodnight in his original formulation of the spheres of argument.

CHAPTER 2

LITERATURE REVIEW

One way to understand the rhetorical function of Food Babe is by understanding how her argumentative strategies fit within what Goodnight (1982) named the spheres of argument. I open this literature review by tracing the evolution of Goodnight's (1982) conception of the three spheres of argument, beginning with a description of the general forms of the technical, personal, and public spheres, and providing an updated description of how the three spheres function in a networked and digitally mediated world. I also explore the translation of argument between spheres, with a general focus on translation of technical (scientific) argument into public deliberation. Finally, I explore the role of visual argument in each of the three spheres in an effort to further explain the impact of digital media on the evolution of the spheres of argument.

Spheres of Argument

"All of the many scholars, using a variety of approaches, who study public controversies of various kinds owe a debt to Goodnight" (Rowland, 2012, p. 195) due to his groundbreaking exploration of the spheres of argument. Goodnight (1982) began his analysis by stating that the purpose of argument is to mediate uncertainty. To even be recognizable as argument, a statement must "partake in the creative resolution and the resolute creation of uncertainty" (p. 199). By establishing that argument begins with uncertainty, Goodnight articulated how and why various arguments arise in societies or cultures. He claimed that uncertainties arise within superstructures that invite particular

argumentative practices. In democratic societies, arguments arise within one of three structures: the *personal*, *technical*, or *public sphere*.

The description of these three structures, or what Goodnight (1982) terms spheres, begins with the statement that "sphere denotes [a branch] of activity" (p. 200) including grounds upon which argument can be built, what types of authority are appealed to, who counts as an expert, and what kinds of things get to count as evidence. Arguments in the personal sphere have informal requirements for evidence, and often rely on personal anecdote as a form of data. The grounds for personal sphere argument are established by the participants in the moment of argument, and they will most likely vary depending on the uncertainty being resolved. Anyone is invited to participate in personal sphere argument, and all people are considered equal in terms of rhetorical power. Because personal anecdote and experience count as evidence, it is assumed that anyone who has experience in a given area is able to speak as with authority on their own experience.

Technical sphere arguments, however, require specialized forms of reasoning.

Scientific data is often required to prove arguments in the technical sphere, and grounds for argument are tied to the technical knowledge of the field being discussed.

Presentation of argument is also more strictly regulated, and arguers are held to rigid standards of evaluation. To be considered an expert within the technical sphere, one must have specific knowledge of a topic and must employ technical and scientific evidence in arguments. There is an expectation that arguers use technical language that

is appropriate to describe the topic at hand, including relevant jargon. Technical experts are particular to a given field, and do not transcend that area of scientific or technical knowledge.

One of the primary differences between technical and personal sphere argumentation are the norms for responding to oppositional arguments. Within the personal sphere, because arguments are often grounded in personal anecdote, experience, and opinion, opposition can be ignored or dismissed as merely a difference of opinion or experience. In technical debates, however, when an arguer is challenged with contradicting facts or data, a response is required. Dismissal of factual challenges is simply not an acceptable response because technical argument is based on accuracy of representation of scientific facts and data. When science is challenged, a scientific response must be given.

The public sphere contains arguments that transcend both the personal and technical, and does not have inherent argumentative practices or norms that are rigidly established. Evidence and argument structure "will not be as informal or fluid as those expressed in a personal disagreement" (Goodnight, 1982, p. 202) nor will they be as limited or specialized as they would be in a technical dispute. Goodnight believed that "an appropriately designed public forum would provide a tradition of argument such that its speakers would employ common language, values, and reasoning so that the disagreement could be settled to the satisfaction of all concerned" (p. 202). The public

sphere will contain arguments that are of interest to an entire community, not just technical experts or private individuals.

Though Goodnight did not cite Habermas in his original description of the spheres of argument, it is important to note that any analysis of public sphere argumentation would be incomplete without recognizing the distinctions between Goodnight and Habermas's conceptualizations of the public sphere. Habermas (1962) wrote that the public sphere "may be conceived above all as the sphere of private people come together as a public" (p. 27). Whereas Goodnight believed that the public sphere is constituted through a set of argumentative norms, Habermas believed that a public may be formed by groups of people that coalesce around a given topic that is of interest to many. This delineation between the public sphere as described by Goodnight versus public deliberation as conceptualized by Habermas will become important when describing how Food Babe calls groups of people, or publics, into being through her various argumentative strategies (not all of which align with Goodnight's articulation of public sphere argument).

Though Goodnight (1982) clearly articulated what counts as public, personal, or technical argument, the spheres are not entirely distinct because "[t]he standards for deciding which events fit into which spheres are sometimes ambiguous and shifting" (p. 200), and it is not always clear which sphere arguments function within. It is also the case that "an argument's location in a particular sphere is not 'given' or self-evident.

The arguers place an argument in a sphere, and their placement always could be

otherwise" (Zarefsky, 2012, p. 213). For example, many of Food Babe's arguments could be placed within either the technical, personal, or public spheres. Her more specific arguments about food ingredients and additives may seem technical due to the scientific language they employ, but they are often explained using personal anecdote as evidence, which is characteristic of the personal sphere.

The assignment of arguments to particular spheres is not arbitrary or neutral. When public arguments are labeled technical, certain audiences are denied the ability to participate if they do not possess the level of knowledge required for participation in technical sphere argumentation. Additionally, when technical arguments are used in public without much regard for the accuracy of representation, the scope of the audience is widened because standards for evaluation in public sphere arguments are much less rigid than those employed within the technical sphere (Zarefsky, 2012). It may be the case that widening the scope of an audience leads to richer public deliberation, but if participants do not possess the knowledge necessary to engage in the more technical aspects of a given argument, expansion into the public sphere may be dangerous in terms of accuracy of representation of science or technical information.

Goodnight (1982) was concerned that the public sphere was being displaced by personal and technical argument. He believed that this was the result of both new technologies that are increasingly influencing public deliberation and an increased "celebration of personal lifestyle" (p. 206). In his original 1982 article, Goodnight did not propose any particular solution to this problem other than to say that the separation

between spheres needs to be reestablished. Though Goodnight began to recognize the influence of communication technologies on the erosion of he public sphere, it was not until his 2012 update of the spheres of argument that he fully understood the impact technologies like social media would have on the spheres of argument.

In his 2012 update to the original essay, Goodnight still did not offer much in terms of a solution to this problem of the erosion of public dialogue. He did, however, claim that new technologies like social media are decreasing the separation between the personal and public spheres. He also believed that increased accessibility of technical information online has led to a decrease in the value of technical expertise because anyone can do a simple online search of a scientific concept and masquerade as an expert once they learn the language of the technical sphere.

<u>Translation Between Spheres</u>

Although it is the case that spheres of argument overlap, some issues exist solely in the technical sphere or the private sphere. Particularly when technical issues become relevant to public deliberation, a need for "translation" (Willard, 1989, p. 303) between spheres arises. Willard (1989) described a "continuum of understanding, with one end marked by messages 'meant to be understood by millions' and the other marked by esoteric expertise addressed and understood by a very small number of individuals" (p. 303) and suggested that the goal of translation should be to reduce separation between the ends of the continuum. He argued that, particularly when policies are driven by technical knowledge, public arguers have to be skilled at speaking across audiences so

that laypersons understand technical knowledge, and experts understand their role in public deliberation. The goal of translation for Willard (1989) is accurate representation of scientific knowledge from technical experts in the public sphere.

When translation between spheres fails, one possible consequence is what Goodnight (2012) described as the displacement of public deliberation by arguments from the technical and personal spheres. Goodnight believed that increased access to technical knowledge has led to a decrease in the value of expertise. When the role of technical experts is devalued, the line between spheres becomes even more blurred and it becomes possible "to advance an argument typical of one sphere while backing it with evidence from another sphere" (Whidden, 2012, p. 244).

Extending Goodnight's work, Whidden (2012) examined the decline of technical expertise in the context of vaccine controversies, claiming that vaccination has become as much a private sphere parenting issue as a public health concern. She argued that, in order for parents to choose to vaccinate their kids, they need to hear compelling evidence not only from doctors or medical professionals, but also from other parents and, in particular, other mothers. In these arguments, personal stories from mothers are seen as technical evidence for vaccination whereas medical information from doctors is evaluated based on personal sphere argumentation standards that are largely circumstantial and based on personal opinion or agreement rather than scientific accuracy. In other words, there is a shift in standards for appropriate evidence, and arguments are no longer rigidly structured as they would be in the technical sphere. In

the case of vaccines, this has meant that fewer parents vaccinate their children despite the fact that there is overwhelming scientific evidence about the safety and efficacy of early childhood vaccines. Goodnight's (1982) solution to this problem was an active reconstruction of the role of technical expertise in an effort to reaffirm separation between the technical and public spheres.

One of the most important aspects of science advocacy in public is the ability of technical experts to gain credibility in the public sphere. This credibility is difficult to establish both because public laypersons have a general tendency to distrust science and because there is a fine line between accurate representation of scientific facts and overuse of technical jargon (Segal & Richardson, 2003; Lessl, 1989). However, when technical or scientific experts can present evidence in a way that is both scientifically accurate and personally persuasive they can establish themselves as credible public rhetors and reinvigorate technical dialogue. Additionally, it is often the case that integration of scientific information and personal stories can be a more effective public strategy, both for scientists in public who attempt to gain persuasive power and activists who hope to become persuasive to technical experts (Fabj & Sobnosky, 1995).

One possible consequence resulting from the disconnect between the technical and public spheres is what Ceccarelli (2011) labeled as a *manufactured scientific* controversy. She claimed that "a scientific controversy is 'manufactured' in the public sphere when an arguer announces that there is an ongoing debate in the technical sphere about a matter for which there is actually an overwhelming scientific consensus"

(p. 196). Controversies are often manufactured in the public sphere to make the scientific community appear divided, usually with the interest of advancing some public policy agenda. Ceccarelli's solution to the problem of translation is that scientists in the public sphere should focus on explaining technical information in relation to particular policies, rather than attempting to educate the public about science in general every time a technical dispute emerges as part of public argument. This is consistent with Goodnight's (2012) argument that technical expertise needs to be reestablished, and appropriately used as a part of technical policy debates, to reaffirm the separation between the technical and public spheres.

Another possible way to avoid the problem of translation is to employ rigid standards for evaluating technical evidence in the public sphere. Paliewicz (2012) believed that public sphere rhetors should test technical argument based on three criteria: "the scientific community should have consensus on the technical issue under consideration" (p. 233), the information being presented should be "uncontaminated with insincere motives" (p. 233), and all allegations of scientific misconduct should be mediated in the technical sphere before bringing issues to public deliberation. Paliewicz believed that scientists, or any technical experts, should not be deferred to in public deliberation unless the evidence they are presenting meets each of these three standards. He agreed with Ceccarelli (2011), who claimed that scientific communities should present themselves as united to the public even when there is a lack of consensus on smaller issues. For example, while some climate scientists disagree about

whether the tipping point for global climate change will occur at four or six degrees

Celsius, there is an overwhelming consensus that climate change is real and

anthropogenic. When speaking in public, climate scientists should focus on this general

consensus rather than dealing in particulars.

Simple fact checking, or statements affirming scientific consensus, may not be enough to reinvigorate technical dialogue in public, though. Bricker (2013) argued that sometimes it is the case that science itself is under attack, not just particular facts.

Controversies, or what he calls conspiracies, are manufactured by anti-intellectuals who ignore scientific facts. Where Ceccarelli (2011) argued that scientists should shift focus to discussions of particular policies and insertion of relevant facts into public deliberation, Bricker argued that it is important to reestablish the credibility of science itself. This will involve a fusion of rhetorical strategies with science in an effort to show that the scientific method is reliable and transparent, and a refusal to let individual facts stand alone but instead situate them within a larger frame of technical expertise. Bricker believed that translation of science into lay terms will help avoid manufactured controversies, but he did not believe that simple translation will be enough to fully reestablish technical expertise in public dialogue.

Networked Dialogue

In a 2012 update to his original essay on the spheres of argument, Goodnight elaborated on the claim that technologies are eroding public deliberation. He claimed that new media technologies, such as social networking sites and what he calls blogs

(what we now would understand as things like Facebook or Twitter), have contributed to the decline of the public sphere in two ways. First, new media technologies are being deployed "without much appreciation for the long-term consequences of such changes" (Goodnight, 2012, p. 264). Some of the long-term negative consequences are corporate control of media outlets, decreased quality of political dialogue, and lack of privacy. Second, because technical knowledge has become more accessible, a culture of expertise needs to be reestablished in order to revitalize public sphere argument, and accurate technical knowledge needs to be consistently represented. To do this, not only do scientists and technical experts need to speak more in public to ensure accuracy of representation of scientific facts, but they need to do more to isolate internal technical debates from the public sphere.

Goodnight is not alone in his view that media technologies have contributed to the decline of public dialogue and a general lack of separation between the three spheres of argument. Rowland (2012) expanded on Goodnight's original argument by claiming that "a blurring of the boundaries of the three spheres is emphasized not only in particular case studies, but more broadly in the culture of the internet, a place where all three spheres are intertwined and perhaps hopelessly intermingled" (p. 197). Online deliberation, and social media in particular, has created new forms of social and political engagement which Goodnight began to recognize in his 2012 update to the spheres of argument essay.

This new form of engagement has been labeled as a networked public sphere by Pfister (2011) who argued that networked publics are a unique way to blur the lines between "rhetoric, the public sphere, and digital communication networks" (p. 49). Pfister argued that because the internet has drastically changed the way in which information is transmitted and received, it no longer makes sense to talk about a single isolable public sphere of deliberation. He complicated this even more when he discussed debates on social media, or what he referred to as the blogosphere (Pfister, 2011), and claimed that online publics are interconnected. Unlike Goodnight, Pfister did not see the expansion of public dialogue on social media as a problem. Instead, Pfister believed that networked public deliberation and the online expansion of the public sphere will lead to better forms of democratic engagement because people from all over the world are able to engage in discussion regardless of place and at the same time. For Pfister, it is not the case that a "celebration of personal lifestyle" (Goodnight, 1982, p. 206) will be the only result of increased social media. Instead, accessibility both in terms of strategies of argumentation (i.e. discussions that take place on social media generally employ personal sphere strategies that are easily usable by everyone), and in terms of access to social media platforms themselves, will lead to better debate.

Another way of thinking about the influence of media technologies on public sphere deliberation is through what DeLuca and Peeples (2013) called the *public screen*. The idea of a public screen "takes technology seriously [and] recognizes that most, and the most important, public discussions take place via 'screens' – television, computer,

and the front page of newspapers" (p. 385). DeLuca and Peeples (2013) argued that it no longer even makes sense to talk about public deliberation absent technology because communication is so drastically different in a world of digital communication. New media technologies "have physically shrunk the world while simultaneously mentally expanding it" (DeLuca & Peeples, 2013, p. 385), exploding the bounds of public sphere communication.

These ideas of the networked public sphere and the public screen are combined into what Ewalt, Ohl, and Pfister (2011) call the networked public screen. The networked public screen, they argue, is the best term for understanding how "image events, iconic and everyday, are produced and circulated in a networked mediascape" (Ewalt et al., 2011, p. 187). It does not make sense to talk about image saturation on the public screen in news media, as DeLuca and Peeples (2013) did without considering the ways in which online deliberation and social media have increased the potential reach of such images. On the other hand, it also does not make sense to talk about networked dialogue without considering the role images and visual rhetorics play. This concept of the networked public screen is essential for the theorization of the ways in which "the internet, as the first truly global medium, allows for a toggling between contexts of action that is difficult to imagine in earlier eras dominated by the voice or print" (Ewalt et al., 2011, p. 189) and discussion of the ways in which social media allows for the networking of not only verbal dialogue but images as well.

Not only is argument on social media networked between individuals, but "today's level of online engagement constitutes a panmediated world in which people are networked to others and to objects via online platforms that can transmit a wide array of information, including images, and do so ceaselessly at great speeds" (Brunner & DeLuca, 2016, p. 285). With the emergence of smartphones and other technologies that make the internet more accessible than ever, we live in an age of *panmediation* or near saturation of images and online argument. For Brunner and Deluca (2016), "media are not mere means of communicating on public screens, media produce public screens as primal scenes of becoming" meaning that it no longer makes sense to talk about online or networked argument absent a theory of panmediation. Instead, they advocate recognition of the panmediated networked public screen.

Each of these theoretical constructions of networked dialogue (networked public sphere, public screen, networked public screen, and panmediation) work together to construct a full picture of how public deliberation has changed in the age of social media and the internet. Images circulate more rapidly than ever before, and public dialogue is more accessible in terms of context, content, and modes of deliberation. This has important implications not only for public deliberation in general, but for public representations of technical and scientific argument as well.

Science and the Internet

It may be the case that within networked deliberation there is a decrease in the value of technical expertise in the way Goodnight described, but it may also be the case

that networked rhetorics and online deliberation lead to better technical debate. Buehl (2016) claimed that social media and blogs may be the best way to talk about science because they allow for near immediate response, often from other experts. He claimed that the peer review process that is required in technical debates takes too long and that in order to show the connections between "the scientific method and argumentation" (p. 5) technical experts should engage in publically visible, especially online, dialogue. When research is posted online, there is an almost immediate response that can lead to faster vetting of research articles and ultimately better science (Buehl, 2016; Fahnestock, 2016). Though the social media sites described by Buehl are specific to the scientific or technical community, and are not accessible by the general public, he is correct in his analysis that such platforms allow for the acceleration of technical and scientific debates. However, I am hesitant to call such platforms true social media because of their exclusivity and lack of engagement with the general public.

Although the internet can lead to better scientific research by increasing the reach, speed, and interactivity of science research, Fahnestock (2016) cautioned against oversimplification of scientific arguments. She claimed that "misunderstandings . . . always emerge in the accommodation of expert discourse to nonexpert audiences" (p. 127), agreeing with Goodnight that there is some danger in the articulation of technical expertise in public dialogue because it often results in a lack of nuance and accuracy in scientific argument. Additionally, while social media and blogs can "engage in rhetorical work on behalf of science" (Kelly & Miller, 2016, p. 230), and begin to bridge the gap

between science and the public, too much integration can result in a complete erosion of the boundary between the technical and public spheres of argument. The point is that there needs to be a balance between technical discourse within scientific communities and broader public engagement. Once such a balance is struck, technical scientific debates will take place within isolated expert communities and relevant facts will be represented in public deliberations in a way that both reaffirms the value of expertise and meaningfully informs public debates.

Reinforcing the value of scientific expertise and technical sphere arguments in the public sphere will ensure that when technical information is needed in public dialogue, it will be accurately represented. This means both that the information presented will be scientifically accurate and presented following the norms of technical sphere argument, such as including data-driven argument and appeals to well-researched evidence rather than authority figures or personal anecdote. Translation of technical debates into public discourse, particularly online, requires active engagement from scientists and technical experts to both ensure accuracy of representation of science (Fahenstock, 2016) and encourage dialogue about relevant scientific or technical issues (Buehl, 2016).

One of the best ways to reinsert relevant technical dialogue into the public sphere is to create online communities with the specific goal of creating productive learning environments rather than spaces for information transmission (Pigg, Hart-Davidson, Grabill, & Ellenbogen, 2016). Creating such educational spaces will require

renegotiation of hierarchies between experts and non-experts, active integration of scientific information with issues that are important to the general public, and setting up participatory cycles of inquiry. When successful, online educational communities can "[forge] linkages between scientific knowledge and local knowledge" (Pigg et al., 2016, p. 264) and increase public understanding of science in general. Though such arenas will function much more like the public sphere than the technical, due to their general accessibility, openness, and argumentative form, their ability to educate the public about technical or scientific issues will assist in the reinvigoration of technical dialogue in public argument.

Visual Argument

Visual arguments, like verbal arguments, can function evocatively in each of the three spheres of argument. The realm of visual argument is incredibly broad, including everything from photographs to bodies to memorials and monuments. Because "visual implies the cultural practices of seeing and looking, as well as the artifacts produced in diverse communicative forms and media" (Olson, Finnegan, & Hope, 2008, p. 3), nearly every cultural artifact could be considered part of the realm of visual argument. Though visual argument is an incredibly broad topic, the focus here will largely be on photographs and images.

In argumentation studies, "[the] turn toward images is important . . . because images have a force that exceeds language's ability to move people to action" (Brunner & DeLuca, 2016, p. 285). Particularly in the context of public screens and networked

argument, images and other visuals have the ability to spread more quickly and efficiently through public dialogue than verbal arguments alone. Brunner and DeLuca (2016) illustrated this phenomenon through a description of the photo of the body of Aylan Kurdi, a young Syrian refugee whose body washed up on a shore in Turkey. The photo circulated through social media sites and was posted millions of times. It was also referenced by numerous world leaders as they commented on the need to change policies about the Syrian refugee crisis. The photo generated more attention and conversation than any verbal argument, or verbal depiction of the refugee plight, was able to. Within mere weeks of being posted, it prompted material policy changes across the world.

Part of the power of images to produce such a strong response comes from their perceived ability to accurately represent reality. Usually, images work to represent reality because "images, particularly photographs, work through a denotative force that is connected with verisimilitude, or the ability of the image to reference things 'as they are'" (Zelizer, 2004, p. 159). This denotative force is accompanied by a connotative force that connects an image to broader systems of symbolism or representation. The ability of images to simultaneously engage denotative and connotative forces makes them incredibly powerful sources of argument.

This phenomenon was further described by Finnegan (2001) as the naturalistic enthymeme. She claimed that

photographic images . . . carry with them a profoundly influential but often unrecognized argumentative resource: their perceived relationship to nature. Because we perceive photographs as fundamentally "realistic" we make assumptions about their argumentative potential. I call this process the "naturalistic enthymeme": we assume photographs to be "true" or "real" until we are given reason to doubt them. (p. 135)

Photographs are allowed to function in argument because they are perceived as standing in for reality. Viewers are invited to participate in the enthymematic form by filling in the argumentative premise that, if a photo exists, it must represent something that actually happened in the world, it must have occurred in front of a camera at a single time and place, and it must have been photographed without intervention from a person. Finnegan (2001) referred to these three premises as *representational*, *ontological*, and *mechanical* realism (p. 143). As long as photographs allow for viewers to fill in one or more of these premises, they can function as visual argument.

Pfister and Woods (2016) challenged this conception of the naturalistic enthymeme by claiming that "contemporary interpreters of images often operate under the auspices of the 'unnaturalistic enthymeme' in assuming that an image is, because of the figurative potential of digital manipulation, less tethered to realism" (p. 236). Their argument is that the emergence of visual technologies such as digital photography and editing software have changed the assumption of audiences; rather than beginning from the assumption that all photos are pure, unedited representations of reality, viewers operate with an understanding that all images have been edited or manipulated in some way. For Pfister and Woods (2016), "it is not the mere fact of technology . . . that

produces new ways of seeing, but how technology interacts with existing cultural currents that produce dominant ocular regimes" (p. 240). In other words, technologies have assisted in creating a fundamental shift in how people interact with images.

Though Goodnight (1982, 2012) is quite thorough in his explanation of the types of arguments that function in each of the three spheres, he does not mention if or how images can be used as argument. Goodnight, along with Olson (1994), did acknowledge the role of visuals in creating controversies, claiming that it is often the case that the verbal and visual arenas work together to create a public controversy, and that visuals can open up new dimensions to controversies that verbal arguments alone are unable to recognize. It is clear that images and visuals function as a type of argument, but their uses can vary drastically, and the functions of images in each of the three spheres has yet to be described.

Within the technical sphere, images largely function as data or evidence of a scientific phenomenon. Images within the technical sphere also induce study, or are the starting point for scientific investigation. Personal sphere images function to induce identification with a given topic, the subject of a photo, or a described context, but do not often serve as unique arguments. The function of images in the public sphere will vary depending on the argument being made but generally public images will function either to induce identification with a public issue, sway action on some policy issue, or direct attention to a topic. The following three sections will expand on these uses of visual argument within each of the three spheres.

Visuals in the Technical Sphere

Arguers employ visuals within the technical sphere as a way to represent data or illustrate a scientific or technical phenomenon. Gross and Harmon (2014) wrote that the interactions between verbal and visual arguments are essential for the portrayal of scientific meaning. Though the idea of the naturalistic enthymeme has been challenged, images are still used to stand in for the natural world (Finnegan 2001; Zelizer, 2004), particularly within science, and are often able to substitute for lengthy descriptions of scientific phenomena. Gross and Harmon (2014) also claimed that the ways in which data is presented or illustrated can drastically shift the perceptions of viewers. If a graph or sketch is illegible or too complex, audiences will be less likely to believe the claim than if the visual representation of data is easily understandable. Gross and Harmon did recognize a problem, though, in that if scientists rely too heavily on illustration to convey meaning they risk inaccurate representation of their ideas.

There is another potential problem with overuse of scientific illustrations which is the fact that post laypeople construct most of their knowledge about scientific information based on visual representations not verbal ones (Gibbons, 2007). For example, most people could easily draw a simple DNA structure but very few could explain the biochemistry Watson and Crick (and Rosalind Franklin) used to develop the double helix model. Scientific images thus "possess substantial persuasive resources; they are a remarkably effective form of visual argument" (Gibbons, 2007, p. 186)

precisely because they are both simple to understand and, as Finnegan described, are seen as accurate representations of scientific knowledge.

This issue of representation of scientific research was picked up by Hommrich and Iskenmeier (2016) who agreed that visuals are helpful in conveying scientific meaning, but believe that there are instances in which visualization may result in oversimplification of technical information. Images can function as evidence, but without explanation they can be misinterpreted or used to support claims that they were not originally intended to support. Hommrich and Iskenmeier (2016) cautioned against the dangers of misrepresentation, and claimed that the interaction between verbal and visual presentation is indeed important, but that there has perhaps been too much of a shift to visual representation of scientific data.

Visuals in the Personal Sphere

Little has been written about the use of images or visuals in personal sphere deliberation. However, the use of visuals in online communication via social media appears to be consistent with how Goodnight described personal sphere argument. Photos are the most common type of post on Facebook, making up 54 percent of all posts across the platform (Cohen, 2014). Videos are the type of post most likely to gain traction through shares and comments, receiving an average of 2,183 interactions as compared to an average of 1,358 for photos, and less than 1,000 for text-only posts (Cohen, 2014).

Memes can be used in personal sphere argument because they rarely rely on technical data or expertise, are usually produced and circulated by individuals without some larger agenda, and generally do not attempt to mediate disagreements. Hahner (2013) defined meme as "a virus-like cultural artifact that proliferates by replication and mutation" (p. 153), generally replicating through social media platforms. Hahner (2013) included all "online images that re-create other visuals" in her definition of memes. This expansion of the term *meme* allowed her to talk about various types of images or photos that circulate through online media. Memes function as visual argument in much the same way that personal photos do, and can include any "ideas, cultural trends, or behaviors that spread from person to person" (Hahner, 2013, p. 155).

This simple transmission from person to person, the relatively easy format of memes themselves, and the evocative nature of visuals used also makes memes an essential place for ideas about science to be spread into the personal sphere (Clancy & Clancy, 2016). Clancy and Clancy (2016) argue that the simplistic form of memes allows them to easily transmit scientific information throughout social media platforms.

However, they also caution against the simplicity of this form and claim that memes about science, particularly GMO memes, have the potential to spread misinformation or provoke unwarranted fear due to lack of explanation. Though memes are a place where people often receive information about science, or at least are notified of emerging scientific or research trends (Clancy & Clancy, 2016), their simplicity and ability to spread rapidly may pose a problem in terms of accuracy of representation of science.

Visuals in the Public Sphere

The ability of a population to see themselves represented in visual culture is essential to the creation of democratic public engagement because "[t]he public sphere depends on visual rhetorics to maintain not only its play of deliberative 'voices' but also its more fundamental constitution of public identity" (Hariman & Lucaites, 2003, p. 36). If individuals believe they are represented in visual culture, they will be more likely to participate in public dialogue. Because publics are groups of people that coalesce around a particular issue through democratic deliberation (Habermas, 1989), the ability to reflect groups in artifacts of visual culture, and thus call them to identify, can create new publics altogether.

A good example of visuals functioning as public argument comes from the earlier example of the image of the body of Aylan Kurdi discussed by Brunner and DeLuca (2016). This image was more argumentatively powerful and effective than any verbal argument alone had been. The affective responses generated from this image sparked policy changes and shifts in public dialogue about the refugee crisis. Though this is not quite the same kind of argument Goodnight (1982) described when writing about public sphere deliberation, it proves that images can function to move large groups of people to care about particular issues, and make changes accordingly. Images of personal suffering can catalyze public reaction.

One of the constitutive factors of creating publics, and thus public argument, is the ability to call groups into being (Habermas, 1962). Not only are individuals more

likely to participate in public dialogue when they feel represented in visual culture (Hariman & Lucaites, 2003), but the images people are presented with are able to entirely change the direction of public conversation. This means that images both increase representation in visual culture, and thus participation in public dialogue, and invite deliberation about particular topics.

DeLuca and Peeples' (2013) idea of the public screen is also useful for understanding how images are presented to the public as argument. Deluca and Peeples' (2013) description of the use of visuals in public sphere deliberation is less about particular images, as Hariman and Lucaites (2003) would argue. Instead, their focus is on the ways in which mass mediated images can have effects on large populations. Much like Goodnight, DeLuca and Peeples (2013) argued that public dialogue is disappearing. Their argument is that corporate interests have gained control of the public screen, and that individual deliberation is being lost due to an oversaturation of corporate dialogue.

The next two chapters expand more on the roles of images in the personal and technical spheres of argumentation, as well as complete an analysis of how Food Babe operates within each of these spheres. Chapter 3 begins with an explanation of how Hari has established herself as a mother and therefore as a credible rhetor within the personal sphere. Then, in Chapter 4, I argue that Hari uses that credibility to function as a pseudo-technical expert despite the fact that she has no technical or scientific training.

In each of these chapters, I argue that the use of visuals in Hari's various argumentation strategies is essential to her success.

CHAPTER 3

FOOD BABE IN THE PERSONAL SPHERE

Food Babe exemplifies Goodnight's fears about the decline of public sphere argument. Goodnight (1982, 2012) described the erosion of the public sphere as happening because there has been both a decrease in the value of technical experts, and an increased "celebration of personal lifestyle" as a result of what others have termed the "me generation" (Goodnight, 1982, p. 206). Food Babe contributes to the degradation of the public sphere by simultaneously engaging in both of these practices. Not only does Food Babe use her physical appearance and status as a mother as evidence that the lifestyle she is promoting is healthy, but she positions herself as a technical expert despite her lack of scientific evidence or technical training. She both devalues scientific expertise by promoting her pseudoscientific agenda and uses her personal life as justification for her *Food Babe Way* (Hari, 2015). This chapter analyzes how Food Babe establishes herself as a maternal expert and subsequently takes advantage of that position within the personal sphere of argumentation.

Goodnight (1982) described personal sphere argumentation as functioning largely through storytelling and conversations between private individuals. The standards for judging personal sphere arguments are highly subjective, and they change depending on the context in which they are being evaluated. Food Babe capitalizes on these argumentative norms. Not only does she rely on personal anecdotes to make arguments about the efficacy and safety of her diet plan and supplement products, she

often uses personal images and stories about her family or child as evidence for her *Food Babe Way*. There also seem to be no standards for judging whether or not the claims she advances are true. None of her followers question Food Babe's lack of scientific evidence when she asserts, say, the link between "natural flavor" additives and cancer (a link she often makes in the captions of her ingredient label image posts, more on that in Chapter 4), but her claims seem to be taken as fact by her followers.

Additionally, Food Babe rarely engages with her critics, an argumentative practice that is only possible within the personal sphere.

In this chapter, I argue that Hari's use of personal images on her Food Babe official social media accounts works to establish her as a maternal authority within the personal sphere of argument. Food Babe participates in exactly the kind of erosion of public deliberation that Goodnight warned against. To explore this claim, I discuss the role of maternal expertise in general, as well as the particular strategies Hari uses to establish herself as a mother and therefore as credible. I then discuss the images Hari posts of her body and explore how they function as part of a larger narrative that conflates health with weight loss. Finally, I argue that her refusal to engage with critics cuts off any potential for public deliberation.

Maternal Expertise

Perhaps one of the best places to examine the differences between personal and technical sphere argumentation is in the case of maternal expertise. In technical sphere discourse, scientific or technical evidence is absolutely necessary to advance a claim,

and usually only technical experts have access to the processes that produce that evidence. Technical sphere arguers must support their claims with scientific data and researched evidence. Answering an argument in the technical sphere must also involve clash between evidence, and well-supported claims that directly engage with the premise of the original technical argument. This is not the case with personal sphere argumentation. Within the personal sphere, personal stories or anecdotes are often taken as evidence, and individual experience is enough to warrant a claim regardless of its replicability. Disagreements arising from differences in experiences are not evaluated as refutative, clashing arguments but rather as mere differences in opinion or experience. There are no rigid standards for evaluating arguments, and what standards do exist will vary with context.

In many instances, parents make decisions about their children's health based not on scientific evidence but on the advice of other parents (Whidden, 2012).

Discussions about topics like vaccination, diet, or medical practices seem as though they would belong in the technical sphere, because they require scientific or medical evidence to be accurately discussed. However, such discussions often occur within the norms of personal sphere argument. Parents tell stories about why they chose to vaccinate or not vaccinate their children. They share their experiences in choosing what to feed their children and why they make the purchasing decisions they do when it comes to children's food products. In these debates, advice from mothers is often more highly regarded than recommendations from doctors of medical professionals because

parents see doctors as supporting their own agenda whereas mothers are seen as honest and caring for their children (Archer, 2014).

Archer (2014) analyzed the example of Jenny McCarthy and the anti-vaccine movement. In an interview, McCarthy responded to CDC evidence of vaccine safety and rejection of the link between vaccines and autism by claiming that "my son is my science" (McCarthy, 2007 as cited in Archer, 2014) and that his autism is the only evidence she needed to believe that vaccines are dangerous. This move allowed McCarthy to position herself as an authority, claiming that her experience with her son is the only evidence she needs to make scientific claims. Food Babe operates similarly, especially with regards to children. Hari has been called the "Jenny McCarthy of food" (Gorsky, 2014), because she frequently relies on personal anecdotes as evidence for scientific (or pseudoscientific) claims. Hari has even made nearly identical claims to McCarthy when she claims that her child is healthy because of the food she eats and has never needed medicine or vaccinations because of her healthy and organic diet.

Maternal expertise is often enacted through the use evidence from one sphere of argument to make claims in another, generally in the form of personal sphere evidence being used to advance technical claims (Whidden, 2012). In the case of Food Babe, personal sphere evidence, namely photos of Hari and her family, are used as technical evidence that her recommendations work. By showing her followers images of her healthy and happy child, Hari establishes herself as a mother and by talking about her diet and nutrition programs in the context of her family, she shows that the health

of her child is a central concern. Additionally, Hari talks about her recommendations in terms of overall health. She often uses the phrase "let food be thy medicine" (Hari, 2018c) and, especially in the context of children, advocates for natural remedies rather than physician-dispensed medicine.

This has the potential to be very dangerous. Not only does Hari directly claim that eating healthy, organic food will prevent all forms of illness (including illnesses best avoided through the use of preventative vaccines), but she claims that the use of her supplements will both prevent and treat diseases (Hari, 2018d). She also warns parents against vaccinating their children due to the amount of chemical adjuvants in most vaccinations, though she offers no explanation as to how or why such chemicals might be dangerous. This means that Hari is not only recommending that parents do not take preventative steps toward protecting their children, but she argues that, even when kids do get sick, parents should "let food be thy medicine" (Hari, 2018c).

For example, one of her most recent campaigns surrounding the release of her Truvani turmeric curcumin supplement product involves claims that it can be used to treat various inflammatory diseases and even cure the flu (Hari, 2018d). She includes in these recommendations that her product is safe for children. She even recommends the use of this turmeric supplement over traditional flu vaccines and treatments.

The Me Generation

One of the two problems Goodnight (1982) described regarding the decline of public deliberation is an increased "celebration of personal lifestyle" by what he terms

the "me generation" (p. 206). He argued that personal experience is displacing all other types of evidence, and that it is becoming more acceptable to ground public (and, to some extent, even technical) arguments in individual experiences. He claimed "Arguments grounded in personal experience . . . seem to have the greatest currency" (Goodnight, 1982, p. 206). This seems even more true in the contemporary world of social media. Though Goodnight originally describes this problem in his 1982 essay, the growth of social media makes it even more relevant now. Social media is meant to be social, a medium to exchange personal experiences, stories, and images. As such, it is structured to privilege the personal.

Hari directly participates in these strategies of using her personal life as argument for her technical and scientific recommendations. Hari often uses personal anecdotes to legitimize her claims about the fact that her diet works. She primarily focuses on the fact that she has a healthy and beautiful child, and is herself healthy and beautiful because she follows her own dietary recommendations. The following two sections address Hari's use of personal images on social media to establish herself as a mother, and therefore able to make authoritative claims to other mothers, and to show that she is healthy and therefore an authority on all health and diet related decisions.

Personal Photos on Social Media

People mostly use Facebook, and other social media platforms, for posting personal photos and information (Statista, 2018). Food Babe is no exception. Though her most frequent posts include images of food or food labels, as described in Chapter

4, she often posts images of herself and her children on her Food Babe official page as well.

Almost all of Food Babe's posts include images of some kind, which is why I have chosen to categorize her posts this way. Nearly all of her posts on Facebook and Twitter pages fall into one of these image categories of food labels or personal photos. I have chosen to exclude posts without an image from my analysis because they are not interacted with as much as her other posts (interactions being likes, comments, and shares), and she uses them much less frequently (Cohen, 2014). Additionally, though the focus of the following sections is on the visuals themselves, it is important to consider the textual descriptions they are posted with as well. Not only is the separation between verbal and visual argument largely arbitrary, but the interplay between the two strengthens both the verbal argument as well as the visual one (Olson, Finnegan, & Hope, 2008).

To establish herself as a mother, and thus be able to tap into the powerful rhetorical position of a maternal expert, Hari often posts images of herself with her daughter and her family. Unlike many of the other types of images she posts, these generally have little or no text description associated with them. Hari seems to be relying solely on the image of herself and her family to be evidence for the fact that she is a mother, and therefore an authority. Though there are rarely explicit arguments about food or health associated with these images, they still function implicitly to establish Hari as a credible expert on food. Because she is a mother, because she has a

family, because she is beautiful, she can be trusted. By showing her followers that she not only recommends eating strategies, but that she uses them herself and with her family, she establishes credibility. These images are essential to the construction of Hari as a mother, and therefore as an authority to whom others should listen.

Figure 1: Hari and Family



Figure 1.1 (Food Babe, 2018) is a simple family photo of Hari with her daughter and husband. All three look happy, healthy, and attractive (according to normative Western standards). They seem to be standing outside on a sunny day, but the absence of a text caption makes it difficult to know exactly what they are doing. However, the lack of text caption actually makes this image more powerful. This image was posted to

¹ All of the figures in this thesis (with the exceptions of Figure 6: Let Food be Thy Medicine and Figure 9: GMO Meme Images) are screenshots from Food Babe's official Facebook page. I have chosen to screenshot the images as opposed to embedding original images because it was important to me to include the captions on each of the included figures. All figures are individually cited in the References section of this thesis.

Food Babe's official page with no context, no guidance as to how it should be interpreted. The captionless image simply serves to remind the Food Babe Army that Hari is a mother.

Many of the more recent images of Hari's daughter show her eating healthy, always identified as organic, foods. These images function to show that certain foods should be consumed by children, and prove that Hari and her children follow the *Food Babe Way*. Working in tandem with many of her images of food labels, as described in Chapter 4, she uses these images to argue that children should not eat processed foods with chemical additives, but should instead eat healthy, organic, non-GMO fruits and vegetables. Here, both text and images are necessary. Simply by looking, one cannot differentiate an organic from a non-organic food item. Thus, Hari needs to make clear that the foods her daughter eats are organic with text that accompanies these images.

Figure 2: Hari's Daughter



Figure 2 (Food Babe, 2017) is a great example of this strategy. In this image, Food Babe shows her daughter Harley in her high chair eating green beans, which Hari identifies as organic. Hari is very clear in her caption that the vegetables Harley enjoys are always organic. In this photo, Harley looks adorable and happy while she is eating her vegetables. Hari's "love at first sight" caption also reinforces the message that she so often spreads to her followers: it is never too early to start feeding your kids good, healthy, organic foods and, unlike most children who experience periods of fussy eating, her children always eat everything placed in front of them.

Before Hari had her own child, she would often post images of other children eating her recipes or other organic food items. These images function much the same way as the images of Hari's own children: they tell her followers that her recommendations are safe and healthy for children, and that her *Food Babe Way* will work for everyone.

Figure 3: Child and Smoothie



Figure 3 (Food Babe, 2013) depicts a child drinking something from a cup through a straw while sitting in a bathtub. In her caption, Hari claims that it is nice to see someone else who "enjoys having green juice in the shower" even though, based on the photo alone, it is not clear what the contents of the cup are. It may be the case that her follower Stacey (who sent her the photo) informed Hari that her child is enjoying Hari's green juice recipe, but from the image alone that detail is not clear. Still, though, the image functions to show that even kids can get in on the fun of organic food. This image also proves that some mothers trust Hari to make recommendations for their children, so other mothers should too.

Photos of her Body

Hari also posts a large number of photos of herself at the gym, or in other situations where she displays her body. Though these images are still a part of personal sphere discourse, they are not a part of Hari establishing maternal expertise. Instead, these images function as proof that Hari actually follows all of her own advice and, clearly, it works because she is thin and beautiful.

Figure 4: Hari at the Gym



Figure 5: Hari at the Beach

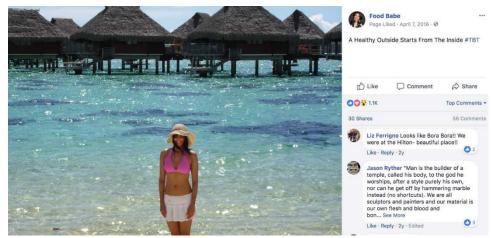


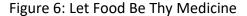
Figure 4 (Food Babe, 2015) depicts Hari standing at a gym, presumably right after

having worked out, with the caption that she just finished an "energizing and fun workout." Though Hari never specifically promotes any exercise programs, she often talks about the importance of physical activity, and the photos she posts of herself at the gym establish that there are more aspects to health than just diet. Once again, these images are often posted with almost no text description, allowing the audience to fill in their meaning. Perhaps the best example of this is Figure 5 (Food Babe, 2016), an image of Hari on the beach with the caption "a healthy outside starts from the inside." Again, this promotes her mission of overall health and food awareness while still maintaining that she is an expert because she looks beautiful or, as she says here, has a "healthy outside."

Weight Loss

Images of Hari at the gym, beach, or any other location that allows her to show off her body (Figures 4 and 5) function as part of a larger theme across all of Hari's work: weight loss. Though many of her official stated missions, including the tagline of her Food Babe website and *Food Babe Way* book, claim that she is interested in health, nutrition, awareness of chemical additives, and "taking down" major food corporations, the way she talks about these missions is often in terms of weight loss.

One of the places this mission is made most obvious is on her Food Babe blog website. On her "About" page, Hari begins with a narrative of how, when she was younger, she would often eat fast food and candy. After getting very sick with appendicitis, an illness she attributes to her unhealthy diet of McDonald's and soda, Hari decided to begin eating healthy and "let food be thy medicine." Though there is some medical evidence for a link between appendicitis and diet (specifically that high-fiber fruits and vegetables support digestive health and limit potential blockage), it is almost certainly not the case that Hari's appendicitis was directly caused by her McDonald's consumption. Even so, Hari uses her recovery and transformation as a claim to credibility about diet and weight loss strategies. She opens her "About" page and personal story with the image seen in Figure 6 (Hari, 2018c), a before and after image of her weight loss, and the claim that "I didn't always look like a babe" (Hari, 2018c) but that once she changed her eating habits she transformed into the Food Babe she is now.





Though she consistently talks about her transformation using terms like "health" or "nutrition," it appears that when she says she used to be unhealthy what she really means is that she used to be fat. And, now that she is thin, she is also a "babe." This conflation of health and weight loss is not unique to Hari, and probably deserves its own thesis, but it does contribute to Hari's legitimation of herself as an expert. Though Hari does not describe herself as a scientist, she does make the claim that she figured out to be healthy, happy, and beautiful because she figured out how to eat. She claims that her *Food Babe Way* diet plan will work for nearly everyone, but does include a disclaimer on her website and in her book that if someone tries her plan and does not lose weight she does not have to take responsibility. Though there are certainly legal reasons for the

inclusion of such a disclaimer, this is still an important rhetorical moment for Hari. It allows her to simultaneously claim that her diet plan will work for everyone, but divorce herself from any responsibility if it does not. This is an important move for Hari because it allows her to maintain an aura of expertise even if her diet plan fails for nearly everyone who uses it. As long as it works for her, and at least a few of her followers, she remains credible. And, if it fails, it is not her fault, but the other person's.

Once again, Hari operates within the personal sphere, but employs the language of technical expertise. Though she describes her weight loss as being the result of a carefully calculated 21-day diet plan (which is for sale at foodbabe.com), she manufactures her credibility by displaying that she is thin and beautiful. Her actual recommendations are not consistent with food science (for example she discourages medicines like painkillers or antibiotics in favor of natural food-based solutions and she claims that unpronounceable ingredients are always dangerous), but the fact that they worked for her allows others to believe her strategies can work for them as well. Most of Hari's followers seem to trust her recommendations not because of their scientific accuracy, but because Hari says they work and the images of her body are proof. This is precisely how personal sphere arguments function, not based on evidence but on anecdote.

Lack of Engagement with Critics

Many have attempted to respond to Food Babe, both on social media and in other locations. A number of parody accounts on Facebook such as Science Babe, Math

Babe, SciBabe, and Food Hunk have attempted to respond to Food Babe. Each of these accounts function in much the same way. They each share posts from Food Babe's original account and either fact check it with links to scientific research articles, or they just describe why the science Hari is representing is wrong. These accounts rarely share original content. Usually, their focus is only on responding to the things Hari posts on her account. In doing this, these accounts have let Hari define the conditions for their debate. Because no attempt has been made to reframe what the issues are or should be, and because these accounts function primarily by sharing and responding to Hari's original content, they have been largely unsuccessful. This could be due to the fact that none of these pages even come close to Food Babe in terms of number of followers (SciBabe is the closest with 307,000 Facebook followers, compared to Food Babe's 1.2 million), but their failures are also due to the fact that instead of answering Food Babe, they often just increase the reach of her message.

Hari also never responds to these critics. Because Hari's Facebook page (and social media in general) functions largely using personal sphere argumentation strategies this lack of response is acceptable. If her recommendations are based on her experience, or her opinion, any challenges must be the result only of differing opinion and therefore do not merit a response. Hari has established herself as a credible expert because she is a mother, because she is beautiful, and because she somewhat systematically discusses food, diet, and nutrition. However, she is able to dodge critics precisely because of the standards of personal sphere argument (Goodnight, 1982).

Because there are no rigid standards for evaluating arguments within the personal sphere, and because any standard that could be established will necessarily change based on context and participation, Hari is able to ignore any attack that does not fall within the bounds she has established for herself. This is yet another way Hari benefits from operating within the personal sphere of argumentation. Within the technical sphere, if another competing expert disagrees with a claim, or presents competing evidence, the response cannot be to simply ignore them. Typically, a debate will take place between experts using well-reasoned argument and evidence deemed permissible by the standards of the community. Ignoring critiques is simply not an option for genuine technical experts.

Additionally, by not responding, Hari shows her followers that, though many will attack her, she will continue her quest to find out what is "really going on in the food industry" (Hari, 2018c). If anything, the fact that so many people have attempted to respond to Hari only proves her point that she is saying things that the "food industry doesn't want you to know" (Hari, 2018c) and that corporations and scientists will continue to push their agenda and silence truth-tellers like Hari. Disagreement becomes further proof that she is right. Food Babe frequently positions herself as a victim of corporations like Monsanto (see Chapter 4). Although she never directly engages with her respondents, she will often post things on her Facebook about how companies will try to "keep her down" (Hari, 2018), but she will continue to be strong for her followers. Her personal resilience is proof that she is correct.

Perhaps the most systematic response to Food Babe came shortly after the release of her book, *The Food Babe Way*, in 2015. Just months after Hari's original publication, authors and food scientists Mark Alsip, Kavin Senapathy, and Mark Draco (2015) released their book *The Fear Babe: Shattering Vani Hari's Glass House*. In the book, they systematically addressed each of Hari's original eight chapters as well as her claims about various ingredients and additives. Each of the authors of *The Fear Babe* are scientists, and all of their answers to Hari contain evidence from dietary research, food and agricultural science, and biochemistry. They addressed Hari's concerns about GMOs by citing the National Academy of Sciences report that finds GM food is completely safe for human consumption (the same report that was cited in Chapter 1 of this thesis), they went through her diet plan step-by-step to deconstruct the methods Hari recommends, and they concluded with a warning against the supplements and herbal remedies Hari frequently recommends and sells on her website.

Despite the fact that *The Fear Babe* so specifically responded to Hari's original book, Hari has never responded. She has never even acknowledged the book at all. This lack of response makes sense, given Hari's placement within the personal sphere. As previously described, If Hari were a true technical expert, she would have to respond to the technical, data-driven claims in Alsip, Senapathy, and Draco's (2015) book because they directly addressed all of the claims Hari makes about food and chemical additives. In the personal realm, however, it is perfectly reasonable to simply ignore someone who annoys you.

Not only do argumentative norms within the personal sphere differ drastically from those in the technical, but there is a vast difference in terms of audience expectation for response. Though Goodnight himself never addressed audience expectations for response, I believe that communal norms are one of the primary reasons there are such rigid standards for debate within the technical sphere but relatively few expectations for response in the personal sphere. Technical experts expect other experts to respond when challenged, especially when that response comes with well-researched evidence. However, audiences within the personal sphere do not seem to have the same expectations. It is perfectly acceptable for a personal sphere arguer to simply disengage when challenged. Debates in the personal sphere often come down to a difference in experience, or even in opinion (Goodnight, 1982), which means that there is a communal expectation that all stories will be held in the same regard. This means that it is not only possible, but perhaps encouraged, to disengage from opponents in personal sphere argumentation because reconciliation of different experiences is potentially impossible and even damaging to those involved.

This lack of response is particularly acceptable on social media. Not only does social media generally operate under the assumptions of personal sphere argument as described above, but social media encourages disengagement when one is attacked. Hateful comments or responses can be deleted by users who do not want to respond, and simply logging out of a social media account is an acceptable way to avoid online conflict. This is more than just a personal sphere disagreement resulting in differences

of opinion, it is a structural limitation to engagement in online dialogue. The acceptability, and ease, of deleting comments or other challenges rather than responding to them once again reaffirms Goodnight's fears about the decline of the public sphere.

One exception to Food Babe's general rule of non-response has occurred. On April 9, 2018, Hari posted a screenshot of a Facebook comment and asked her followers how she should respond. The posted comment can be seen below in Figure 7 (Food Babe, 2018) along with her caption containing possible options as to how to respond. The comment was originally posted below a photo of Hari and her daughter. In the original photo, seen in Figure 8 (Food Babe, 2018), Hari is wearing a bikini and the caption is about how happy she is to be spending time outside with her family. Though I have argued that Hari uses images such as this one to reinforce her standing as a mother and health activist, this one takes on a slightly different character.

Figure 7: Comment Re-Post







In the re-post of the comment that "[Food Babe's] arms look like they have 0% muscle definition" (Anonymous, 2018), Hari gives her followers four possible responses to this commenter. Although she posts the comments as though she is seeking guidance in how to respond, she actually responds in all four ways by posting them as options.

As you can see in Figure 7, the first two options are largely defensive about her diet and workout habits, the last option is somewhat forgiving, and the third option is just to make an obscene gesture to the original commenter. The second option, a note about the dangers of decreasing body fat while breastfeeding, is an explicit foregrounding of her status as a mother. Interestingly, though she asks her followers how she should respond, Hari never directly engages with the offensive commenter. She lets her Food Babe Army take over and respond for her. There are now over fifty replies

to the commenter, none of which are from Hari herself. She was successfully able to use her screenshot post to direct her Food Babe Army at the commenter without having to directly reply to them herself. By posing a list of possible responses, Hari was able to simultaneously maintain her pattern of not directly responding to critics and encourage her Army to respond in exactly the way she wanted them to. In many ways, this image is the perfect example of Hari's general lack of response to her critics. Though this example is unique because it is the first and only time she has posted a direct comment like that, it is also consistent with many of her previous strategies because, once again, Hari, herself, is not responding to her critic.

attacks to her appearance or her body function as attacks to her primary source of evidence. This commenter could be dismissed as an internet troll, but Hari takes the time to respond to him, albeit in a somewhat unconventional way. I believe Hari chose to respond to this commenter for a few reasons. First, because he is challenging her body, or her primary source of evidence that her diet and health recommendations work, she has to respond because her credibility is being threatened in this instance.

Second, because the commenter is attacking her body, she is easily able to pose options to her Food Babe Army and let them do the responding for her. Her position of motherhood is also under attack in this instance, which is highlighted in the second response option. This means that responding to this particular comment is essential not only for Hari to protect her body as the primary source of evidence for her Food Babe

Way, but also as evidence of her motherhood. Finally, because the commenter is not responding to her science, she is under no obligation to provide factual or scientific information in her response.

Not only did her original image function to reestablish Hari as a beautiful and healthy mother, but it allowed her to create a renewed sense of cohesion among her followers. Her Army of followers not only responded to the negative comment, but left a flood of over 2,000 comments on her original photo, nearly all of which are positive and supportive of Hari as an activist and mother. This might be interpreted as Hari winning the debate. Her followers successfully responded to the commenter for her, and the original image of Hari in a bikini is one of her most liked photos this year. This crowd-sourced response is also emblematic of personal sphere argument. If Hari were to engage with a scientist critic in this same way, she would lose. Hari does not have the technical evidence to back her claims, and setting her followers off on a technical expert is not an acceptable way to win a technical sphere debate. However, here, because the commenter was commenting on only her appearance, it is an easy place for Hari to bring her followers together and sic them on the offensive commenter. This response is perhaps strengthened by the fact that Hari uses her body as a primary source of evidence for many of her claims about weight loss and diet, so forcing her followers to defend her beauty is, in a way, making them defend the Food Babe Way as a lifestyle.

Conclusion

Because Food Babe operates within the personal sphere of argumentation, she is able to take advantage of argumentative strategies that are unavailable to technical experts. This means that as long as Hari's followers recognize that she is a mother, that she is beautiful, and that she is healthy, she will remain an authority. It also means that the expectations for response are much lower. Hari is able to frame any opposition as either a difference in opinion or experience (i.e. this diet worked for Hari but might not work for everyone), can be framed as a personal attack (as seen in Figures 7 and 8), or can be used to strengthen her position against the evil science corporations that are just out to get her and suppress the so-called truth about food. This allows Hari to continue to make technically unsubstantiated claims about food science, diet trends, and ingredients and additives that personally are persuasive. However, Hari not only uses personal sphere argument, but also tries to mimic technical argument.

The next chapter addresses more specifically the rhetorical strategies Hari uses to masquerade as a technical expert. Much of her ability to function as a pseudotechnical expert (a term I will define in Chapter 4) is due to the fact that she has so successfully established herself as a personal sphere arguer, and so often operates within the norms of personal argumentation particularly when it comes to expectations for responding to critics. This is perhaps the most important aspect of Hari's constructed online persona, because it allows her to advance technical claims, and function as a pseudo-technical expert, without having to adhere to the norms of the technical sphere.

In many ways, her dual rhetorical position within the technical and personal spheres makes her invincible.

CHAPTER 4

FOOD BABE AS A PSEUDO-TECHNICAL EXPERT

In Chapter 3, I analyzed how Food Babe's arguments function within the personal sphere. The focus of this chapter will be how Food Babe constructs herself as a technical sphere expert while still maintaining her persona as a young, healthy, beautiful mother. It is often the case that Food Babe uses her rhetorical position as a mother to enhance claims about the more technical aspects of her food-based activism, including exacerbating the fears of mothers about chemical additives, claiming that certain ingredients are dangerous for consumption by children, or even that vaccines might be unsafe due to the chemical adjuvants added. She is able to maintain her position as a personal sphere expert while, at the same time, functioning as a pseudo-technical expert by adopting both the language and argumentative form of more traditional technical sphere rhetors.

In 2012, Goodnight described the encroachment of the public sphere by both pseudo-technical expertise masquerading (or what he refers to as amateur technical enthusiasm) as actual scientific knowledge and an overt celebration of personal lifestyle and privileging of personal stories over other types of evidence. Instead of these pressures coming from two discrete directions, Food Babe demonstrates how they can occur within the same arguer and within the same argumentative move. In this chapter, I describe how Food Babe positions herself as a technical expert despite her lack of scientific training. I refer to this rhetorical position as *pseudo-technical expertise*. This

builds on the analysis from Chapter 3 that describes how Food Babe has capitalized on what Goodnight (1982) described as an emphasis on personal lifestyle to gain the trust of her followers.

I choose to call Hari a *pseudo-technical expert* rather than a *technical expert* for a few reasons. First, Food Babe has no scientific or technical training. As stated on her website, her only claim to knowledge about diet and food is that she once lost a lot of weight after getting very sick (Hari, 2018c). Hari repeatedly claims that her methods work for her, but not necessarily that they are actual food science or that they will work for everyone. However, she sells them to everyone. Additionally, one of Hari's primary stated missions is to take down the "food and chemical industries" by "exposing what's really in your food" (Hari, 2018c). Again, she does not claim to be a scientist. She simply claims to be an activist interested in clean food who knows what she's talking about because her *Food Babe Way* has made her beautiful and healthy.

Second, Hari mimics the form of technical sphere argument, but the claims she makes are not factually correct. She often uses scientific terminology or jargon and claims that the dangers of particular chemical food additives are supported by scientific research. However, the only actual evidence she ever provides is either that her recommendations worked for her and resulted in her losing weight and remaining healthy, or other unwarranted claims on her own blog posts. She claims links between chemical additives and diseases but rarely provides studies to support her claims (though she frequently uses phrases like "scientists agree" or "evidence proves that. . ."

without an explanation of what scientists or evidence she is referring to). She also mimics the technical sphere strategy of appeal to expertise when she uses herself as evidence for her claims. Whenever she argues that she is the only person telling the real truth about the food industry, or relaying secrets that "corporations don't want you to know," she is positioning herself as an authority figure that is in fact the only technical expert that knows enough to relay accurate information to the public.

Finally, many of Hari's followers seem to perceive Hari as a scientist or technical expert. Her followers frequently post on her social media accounts asking her about the safety of a specific food additive or ingredient. They treat Hari as an authority. Although Hari rarely responds to such inquiries, the fact that people ask her so often about the safety of particular food items suggests that Hari's followers trust her to both know and tell them the truth about chemical additives. Followers also frequently reference Hari's success in petitioning fast food companies to change ingredients as evidence of her technical expertise.

Hari's lack of scientific accuracy is not enough reason to exclude her from the category of technical experts. Though I have chosen to refer to her as a pseudotechnical expert rather than as a true technical expert, her argumentative strategies closely mimic traditional technical arguments for all the reasons listed above. One of the most important distinctions between Hari and true experts is the fact that her recommendations are scientifically inaccurate, but that fact alone is not enough to disqualify her from occupying the rhetorical position of expertise.

Following the release of her 2015 Food Babe Way book, Hari shifted her focus from petitioning major food companies to change products to selling her own products. Thus, her post-2015 social media posts focus more on particular ingredients than on big food companies. It may be the case that the success of Hari's early campaigns against Chick-fil-A, Subway, and Kraft paved the way for her to shift focus from activism to examination of ingredients. If her followers see that Hari is successful in making companies remove dangerous chemicals from their food, it no longer matters whether she has any technical or scientific training. The only thing that is important is that she is successfully making change. The fact that corporations listen to her petitions and make changes based on Hari's recommendations serves as evidence that she must be telling the truth. Once Hari's followers perceive her in this way, the shift to addressing ingredients in particular processed food products is simple. To her followers, Hari was the only one telling the truth about chemicals used by corporations, so she must be the only one telling the truth about additives in everyday food products as well. The acceptance of Hari as an authority is strengthened by her use of scientific terminology that enables her to perform the role of a technical expert to her followers. However, she merely performs the role of expert, rather than actually being an expert, thus the pseudo modifier.

Value of Experts

Goodnight (2012) claimed that one of the primary reasons the public sphere of discourse is being eroded is the decrease in the value of technical expertise. Shifting his

position somewhat from his original 1982 articulation of public deliberation simply being handed over to technical experts and decided in the technical sphere without involvement from the public, Goodnight (2012) now articulates the problem as one of increased access of technical and scientific information. Not only are "technical discourses ever more accessible to public discussion" (Goodnight, 2012, p. 265) because information is readily available online to anyone who looks for it, but technical experts are consistently questioned by "amateur [enthusiasts]" (p. 265) online. Both of these factors have allowed Food Babe to establish herself as a pseudo-technical expert.

In her book *The Food Babe Way*, Hari (2015) claims that there is no amount of chemicals that is healthy to ingest, though she never offers a definition of what she considers to be a chemical. Additionally, she tells her readers to "avoid all ingredients you can't pronounce or that you've never heard of" (Hari, 2015, p. 252) because without being able to pronounce a chemical ingredient, there is no way of knowing whether it is safe. Both of these statements show that she relies heavily on the term "chemicals" as being innately problematic. In fact, the focus of the first half of her book is on avoiding chemicals, toxins, and GMOs in food products. She often uses scientific-sounding language, such as calling food additives adjuvants (a term used to describe additives in vaccines, defined as any chemical that enhances a body's immune response) or describing ingredients in terms of their volatility or toxicity (again, not terms that generally apply to food or nutrition chemistry), but rarely includes citations or studies

about food science. It seems to be enough for her and her followers to just use jargon and say something that sounds scientific enough.

Because biotechnologies such as genetic modification are so complex, methods are varied, and people have an innate distrust of food science, critics like Food Babe are able to gain traction fairly easily. Even biochemists working on GM technology disagree about methods for genetic modification, uses of GM crops, and evolutionary safety ² of such products. Though these internal scientific disagreements do not have any effect on the safety of everyday GMO food products, it is easy for someone like Food Babe to point out that there are such inconsistencies, and use scientific or technical debates as evidence for her own fearmongering (Boschen et al., 2006; Tagliabue, 2016).

Because food is directly consumed, people tend to be more concerned with chemicals in their food, or biotechnology in food-related products, than they are about scientific advances in general (Belton, 2001). Once again, Hari capitalizes on these fears by highlighting small, specific chemical additives and claiming they are dangerous. Hari rarely offers any explanation as to how or why certain chemical additives, or GM food products, are dangerous. She simply highlights ingredients or labels that sound scary or are difficult to pronounce and tells her followers to avoid them. Sometimes she claims that there is a link between certain ingredients and diseases like diabetes or cancer, but there is never an explanation of the causal link between, say, azodicarbonamide (ADA,

² I am choosing here to use the term "evolutionary safety" because there is an overwhelming scientific consensus about the safety of GMOs in terms of human consumption and use in food products. However, long-term effects of genetic modification on plant evolution and resistance to pests and diseases are yet to be described.

the chemical she petitioned Subway to remove from their bread) and heart disease. By adopting the language of science, and exploiting already existing fears, Food Babe is able to masquerade as a technical expert to her followers.

By consistently addressing similar issues about food additives, ingredients, food-related biotechnology, and diet recommendations, Food Babe establishes a vocabulary for her followers. This allows Hari to fulfil one of the primary roles of scientists in the public sphere or, in this case, pseudo-scientists in the public sphere, of both "[making] science suitable for the people [and making] the people suitable for science" (Lessl, 1989). For an expert to be credible, they have to establish that they can convey technical information, but they have to do so in a way that primes people for future scientific knowledge.

Food Babe does this in multiple ways. Once her Food Babe Army is primed to believe that certain additives in foods are dangerous, or that chemical ingredients should be avoided, they will be more willing to accept her more extreme recommendations or even buy her products. Though it is the case that Food Babe rarely explains her science, and seems to rely only on jargon as evidence, she still functions as a pseudo-technical rhetor due to her cooption of technical strategies and use of scientific terminology and arguments in the personal and public spheres. She also equips her Food Babe Army to read their own image labels by telling them what ingredients to avoid and why, always returning to the claim that if you do not know what a chemical is, or cannot pronounce its name, it should be avoided.

Food Babe also primes her audience to accept her unsubstantiated claims about ingredients and additives because she has worked to establish herself as a maternal expert. Chapter 3 described how Hari's rhetorical position as a mother allows her to be credible to other mothers, simply through the assumption that all mothers necessarily do what is best for their children (Whidden, 2012). Hari has primed her followers to believe her as a mother, and she uses that credibility to further claims about supposedly dangerous food chemicals. This is another way that Food Babe operates as a pseudotechnical expert. She is not using the characteristic scientific, evidence-based arguments of genuine technical expertise, but rather is using personal sphere strategies such as personal anecdote or images of her children to establish expertise.

This dual operation as both a personal and pseudo-technical expert also allows her to advance seemingly technical claims about processed food products without evidence. Food Babe has adopted the terminology of the technical sphere, and positioned herself as a pseudo-technical expert, but often operates within the personal sphere where the standards for evaluating argument are much less rigid. By doing this, she is able to be perceived by her followers as a technical expert but, at the same time, avoid the rigorous evidence and argumentation standards that generally apply to actual technical expertise. She has adopted the language and argumentative form of traditional technical expertise, and is therefore able to be perceived by her followers as a true technical expert, but she does not adhere to the expectations for response that true technical experts are held to.

GMOs

One of the topic areas Food Babe has taken a particular interest in is genetically modified (GM) food. Although it is not surprising that she has chosen GM foods as an area of activism, many times she has devoted nearly all of her efforts toward GMO labeling or related activism against the agricultural biotechnology corporation Monsanto. Though Hari has never petitioned Monsanto to change any corporate practices, she often claims that they are the cause of the recent explosion of GMO food products.

This focus on GM foods is interesting for a few reasons. First, as mentioned above, the science of genetic modification is not exactly agreed upon by all biotechnology researchers (Boschen et al., 2006). Though there is a consensus about the general safety and utility of genetically modified foods, there are hundreds of processes by which organisms can be genetically modified. There are also thousands of possible GM products, not limited to food, all of which have different uses and applications (Buechle, 2001). It makes sense that Food Babe would focus on only food-related uses of GM technology, and the labeling of GM products, but it is important to recognize that genetic modification is a massive area of science and biotechnology research and not limited to only uses in consumer food products (Belton, 2001; Boschen et al., 2006).

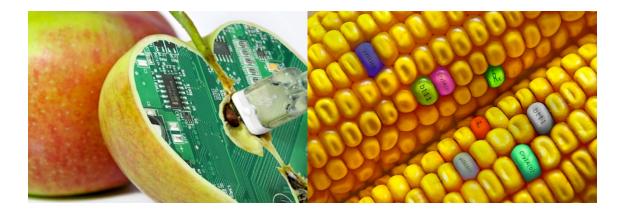
Second, many of the arguments she makes against GMOs and Monsanto come in the form of memes on her various social media accounts. Food Babe generally does not post memes, but the topic of GMOs seems to be the one exception. Clancy and Clancy

(2016) argued that memes may actually be one of the most effective ways for anti-GMO activists to make their case in the public sphere. They argue that because people have a general fear of biotechnology, especially as it relates to food products, it will not take much to capitalize on the fears of people using images. Memes about the process of creating GMOs, the products of genetic modification, and the implications of consuming such foods are effective argumentative strategies because they purport to show the truth about genetic modification in a simple, clear image. Figure 9 shows what some of these images and memes might look like (left image from Borrell, 2016; right image from Thomas, 2015).

Though Hari did not post either of the memes included in Figure 9 to her account, I believe they are important to include for a few reasons. First, followers have posted images similar to these on her account in many instances. An image very similar to the one on the left in Figure 9 was posted to Hari's page in 2012 with the caption "the truth about GMOs." Second, these images are representative of the type of anti-GMO rhetoric that circulates online through the use of memes. Many of these images circulated on Facebook and other social media cites before Food Babe's page existed, and I believe they are integral in priming the public for accepting people like Food Babe. Belton (2001) and Clancy and Clancy (2016) both argue that anti-GMO memes were integral in creating public distrust of food-related biotechnology. Finally, though Food Babe does post anti-GMO images, they are usually specific to Monsanto or other biotechnology companies rather than individual GM products. However, as described by

Clancy and Clancy (2016), images that critique the products of genetic modification are the most common on social media sites, so these images are important to include.

Figure 9: GMO Meme Images



There is an interesting implication to the effectiveness of these unscientific images and memes. Usually, scientific images, or at least images about science function through what Finnegan (2001) called the naturalistic enthymeme. Images can be used as proof for an argument about some natural phenomena because it is assumed that they represent something real that happened and was able to be photographed. Pfister and Woods (2016) later argued that this is no longer true because now, rather than assuming all images are accurate reflections of reality, audiences assume that all images have been altered in some way, either digitally or otherwise. Though the images of GMOs in Figure 9 have clearly been digitally altered, they seem to somehow function as visual arguments under the conditions of the naturalistic enthymeme. Food Babe posts images such as these with captions like "the real dangers of GMOs" or "Monsanto corn" and writes in her descriptions of the images that there is no way to know what will really

happen when foods are genetically modified or what Monsanto will do to our favorite fruits and vegetables.

Although it is clearly the case that genetic modification will not result in kernels of corn being replaced by pills, or apples with a circuit board inside, these images seem to function as naturalistic arguments rather than unnaturalistic ones. Audiences seem to believe these images as arguments against genetic modification, or at least they seem to be acceptable as a warning of possible side effects of GM technologies. These images circulate on Food Babe and others' websites as anti-GMO propaganda despite their lack of realism. Clancy and Clancy (2016) argued that this is most likely the case because people are so hesitant to trust food scientists that, even though they know the images do not represent reality, they believe they are closer to the truth than seemingly natural scientific images. Public distrust of GM technology is so high that people are more willing to believe Photoshopped images as an actual warning than they are to believe that real, scientific images are unaltered.

Food Babe as a Manufactured Controversy

Food Babe functions as a pseudo-technical expert in a pseudo-controversy. I have already established that she lacks technical expertise; this section will establish that she is operating within, and in fact even contributing to the creation of, a manufactured scientific controversy (Ceccarelli, 2011). The description in Chapter 1 about the safety and utility of food science and biotechnology already proves that Food Babe is operating outside of scientific consensus. More than that, though, her

recommendations are often actively opposed to science and research about diet and nutrition. GMOs are both safe for consumption and healthy, though she recommends against their use. Most food additives are perfectly safe for consumption, especially in the amount that they are present in processed food products, yet she calls them dangerous chemicals and tells her followers to never consume them at all; vaccines are almost universally recommended despite the fact that she claims her Truvani turmeric supplement is the only medicine anyone should ever need.

Ceccarelli (2011) described manufactured controversies as often created by public figures in the interest of creating policy change. In this instance, Food Babe is not manufacturing controversy in the interest of creating a new policy but instead in an attempt to generate more followers and sell her products. Aside from her various petitions, Food Babe rarely claims to be operating for the advancement of a political or policy agenda. Instead, she claims only to want to make the public aware of what is in their food. Although most of her posts are consistent with this mission, it seems that her actual goal is increasingly to sell products. Almost all of her posts about the danger of certain ingredients include a link to organic food sponsors. She consistently tells her followers that the only way to really learn about the dangers of food is to read her book, and the only way to prevent yourself from being poisoned is to follow her *Food Babe Way* 21-Day diet plan (Hari, 2015).

Pseudo-Technical Expertise on Social Media

Though Goodnight never specifically addressed the role of social media in the degradation of public sphere argument, it is clear that social media contributes to the displacement of public discourse (and, to some extent, technical argument) in favor of personal argument, both on social media and in general. Others have commented on the relationship between social media or networked technologies and the decline of public deliberation (Pfister, 2014; Rowland, 2012), but here I want to specifically analyze the problems Goodnight identified with public deliberation with regards to new media technologies such as social media.

Food Babe's social media accounts offer brief snapshots of some of the dangers of consuming processed food products. Many of her social media posts rely on similar argumentative strategies to those she uses in her book, blog, and in public speeches such as calling nearly everything a "chemical" and relying on technical-sounding jargon to make her points without having to ever explain actual food science. There are two primary types of posts she makes on her varying social media accounts that accomplish this goal of sounding technically proficient without having to explain science or provide technical evidence. First, Food Babe often posts images of food labels with certain ingredients highlighted as dangerous, or images of fast food items that she claims contain problematic additives. Often, these posts contain a link to her blog site where she posts a healthy recipe for a similar food item. Second, she posts simple black and

white images that state facts about food or diet science. In the following two sections, I will address each of these types of post specifically.

Food Labels

Some of Food Babe's most frequent images on social media include reproductions of food labels with certain ingredients highlighted as dangerous. There are hundreds of these images on her various social media sites, but here I have chosen three that illustrate the various rhetorical moves Food Babe makes with these image types. Generally, these images function to help Food Babe establish herself as a pseudotechnical expert and gain credibility with her followers.

Figure 10: Marshmallow Mayhem



Figure 10 (Food Babe, 2013) shows an ingredient label image that Food Babe posted to her Facebook page in 2013. This image shows a bag of Kraft Jet-Puffed marshmallows with the caption "marshmallow mayhem." Next to the image of the product, she provides a red check list with various problems this marshmallow product has including that it is owned by Kraft, contains GM ingredients, and is made with

artificial flavor. Below the image and checklist, she provides a full list of ingredients. This image differs somewhat in form from the other ingredient label images because it includes a typed list of ingredients rather than a photo of an ingredient label, but it still fits within this category because the focus of the image, and the associated description, is on the ingredients in the Kraft marshmallow product. This image also illustrates how Food Babe's ingredient label images have changed over time. Earlier images looked much like this one; they were not usually photos but instead included typed lists of ingredients and checklists for things to avoid. It is only within the last year that Food Babe has switched her form to images like Figures 11 or 12.

The textual description associated with this image targets the named ingredient "artificial flavor" and claims that "ARTIFICIAL FLAVOR CAN MEAN ANYTHING."

Additionally, Hari describes artificial flavor as being dangerous because it has "not been evaluated for safety or toxicity" and because it is "extremely volatile." These phrases are another example of Hari using technical-sounding language to function as a pseudotechnical expert. However, once again, there is little explanation as to what these terms mean or why they should influence purchasing decisions. The only thing included in this post that comes close to an explanation is a link to a post on Hari's blog that discusses the dangers of natural flavors but, again, the blog does not offer any kind of explanation as to why artificial flavors are dangerous or what she means by volatility. Instead, much like the caption to this image, the post claims that all chemicals are dangerous and relies on technical jargon without explanation.

Figure 11: Go-Gurt Ingredients Label

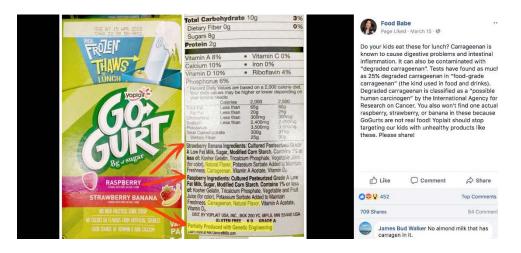


Figure 11 (Food Babe, 2018) represents what has become a more traditional post on Food Babe's Facebook page. In this image, a Yoplait Go-Gurt container's front and back labels are presented side by side. On the left side of the image, the front of the container, Hari has added red arrows pointing to highlighted ingredients on the back label, but the arrows seem to be randomly positioned. They are not anchored to anything on the front label nor are they pointing to anything specific on the ingredient label side of the image. On the right side, Hari has highlighted the ingredients "natural flavor" and "carrageenan" as well as the indication that this product has been "partially produced with genetic engineering."

This image is captioned with an explanation of the dangers of carrageenan as an additive, or rather the dangers of contamination of food grade carrageenan with degraded carrageenan which Food Babe claims is linked to digestive diseases and even cancer. Hari also focuses in this caption on the dangers of marketing this product to kids, given the dangers of the highlighted additives. This image also fits within Hari's

recent campaign against the ingredient "natural flavor." She usually attacks these products by claiming that there is nothing "natural" about processing and packaging food, and that when food companies list "natural flavors" on ingredient labels they are only doing so because they want to hide the real ingredients they are using. Though this image does not focus on natural flavor, the fact that it is highlighted means that it fits within this campaign. Once again, there is little to no actual explanation of why either carrageenan or natural flavors are dangerous. She offers a bit of an explanation that carrageenan is supposedly linked to cancer, but even the study she references in her caption only labels degraded carrageenan (a different chemical than would be added to food products) as a "possible" carcinogen. She ends the caption by noting that there are no "actual" fruits included in this product but, again, offers no explanation why these products are materially dangerous to kids.

Figure 11 is also important because it shows that Hari has not only shifted focus from more broad anti-corporate activism to particular ingredient label dissections, but that her most recent food label image posts have been about products that are specifically marked to children. She opens the caption by asking her followers if they allow their kids to eat products like this, and ends by claiming that Yoplait should stop marketing such dangerous products to children. These statements allow her to once again capitalize on her rhetorical position as a maternal expert and reaffirm that her work makes her not only a mother but a *good* mother who is looking out for the health and safety not only of her own child, but of all of her followers' children as well.

Figure 12: Don't Poison Santa



Figure 12 (Food Babe, 2016) shows images of the front and back of a Betty

Crocker Sugar Cookie mix. There are no particular ingredients highlighted but the entire image is overlaid with the caption "DON'T POISON SANTA." The text caption associated with this image explains that this brand, as well as many others, includes GMO ingredients that have supposedly been linked to infertility, cancer, and Alzheimer's.

Food Babe also claims that cookie mixes contain "very controversial" carcinogenic ingredients. Food Babe does not say what these ingredients are, why they are controversial, how they are produced from petroleum, or what about them is carcinogenic. Once again, she uses technical-sounding language with absolutely no explanation of the science behind her claims.

I chose to include this image because it is an example of a time she associated an ingredient label post with a link to a recipe to substitute for the processed product she tells her followers to avoid. As you can see in the caption, below the claims about the carcinogenicity of cookie mixes, she includes a link to a recipe for sugar cookies on her

blog. In the linked recipe, as well as in nearly all of the recipes on her blog, she incorporates ingredients from companies that sponsor her including her own nutrition supplement brand, Truvani. In fact, an entire section of her official Food Babe website is devoted to recommending products such as food items, supplements, diet plans, and even equipment like juicers and air purifiers. These products are often linked to her posted recipes. In the description of the "Food Babe Shop" (Hari, 2018b) section of her website, Hari claims that purchases made from the links on her page will "help fund this blog and spread the word" (Hari, 2018b). In other words, she makes commission from selling products for various brands. She does not hide this from her followers, in fact she often only recommends products in her recipes from companies that sponsor her, proving again that her mission is not necessarily just to make her followers happy and healthy, but it is to sell products.

Fast Food Dissection

Included in this type of food label image are what Food Babe calls "fast food dissections." In many of these posts, she calls out corporations for supporting Monsanto, factory farming, or using non-organic or GMO ingredients. These images function very similarly to her ingredient label images, but I have chosen to assess them in a separate section because where the ingredient label images usually focus on avoiding particular additives, these fast food images usually include a call to boycott food companies such as Starbucks, Chick-fil-A, In-N-Out, or Subway. Interestingly, as her overall activism has shifted over time from more general anti-Corporate petitioning to

more specific smaller focus on particular ingredients, so too have the images she posts shifted from more general boycotts of entire companies to a smaller focus on ingredients in particular fast food items.

Figure 13: Dissecting In-N-Out



Figure 13 (Food Babe, 2016) is the most representative of the general form of these "fast food dissection" posts. Usually, these images contain a photo of an item from the fast food chain being analyzed alongside a long list of problems with both the individual food item and the company itself. In Figure 13, the list included in the image contains descriptions of ingredients such as hydrogenated soy oil and high fructose corn syrup, claiming that these ingredients are linked to diseases such as cancer and diabetes. Other items in the list, as well as the caption associated with the posted photo, describe the problems with In-N-Out as a company. The focus of the caption is on factory farming as a practice, which is slightly different from Hari's general focus on ingredients and additives. Though many of the items on the list in the image itself are

consistent with her usual activism, the caption is somewhat different in that is chooses to focus on CAFOs as opposed to the health value of the food being "dissected." Figure 14: Dissecting Carl's Jr.



The image in Figure 14 (Food Babe, 2018) is a more recent iteration of the "fast food dissection" image type, and is more similar to Figure 11 than it is to Figure 13. This is consistent with the general recent trend of Food Babe to focus on particular ingredients rather than overall corporate practices. This image includes a simple logo and photo of a Carl's Jr. burger above a full list of ingredients, some of which are highlighted in red. There is no explanation as to why some ingredients are highlighted or how Food Babe chose to highlight the additives she did. Figure 14 is also important because it participates in Food Babe's campaign surrounding "natural" food items. This image functions somewhat differently though, because her focus here is not on calling out so-called "natural" ingredients as being cleverly disguised chemicals but rather she

contrasts this "conventional" beef burger with a discontinued "all-natural" beef burger that would have been produced without steroids or antibiotics. In this instance, she highlights chemical names in the list of ingredients and describes them as "nasty additives" in the caption. Interestingly, this image does not make any claims about individual ingredients other than simply calling them "nasty" and highlighting them in red in the ingredients list.

Figure 15: Subway and Azodicarbonamide



Within this category of post, Food Babe also often compares the additives in food to chemicals in other things. Figure 15 (Food Babe, 2014) shows an example of Food Babe comparing the thickening agent azodicarbonamide (ADA) in Subway bread to a yoga mat. This is one of the most visually complex image types Hari posts, and there is often a lot of work done within the image instead of in the associated caption. In Figure 15, there is an image of vegetables wrapped up in what appears to be a yoga mat alongside the claim that ADA is banned because of links to allergies, asthma, and

respiratory issues. Food Babe also claims that ADA is banned in other countries but Subway continues to use it in US products. There is an included list of the types of Subway bread that include ADA as an ingredient, as well as another image of a yoga mat with the Subway logo on top of it. Within the caption, Hari includes a link to a petition for Subway to change the ingredients in their bread as well as the claim that "we are changing the world together – one ingredient at a time" (Hari, 2014).

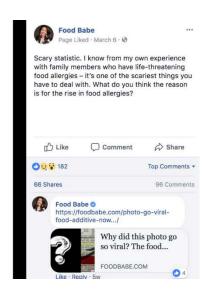
Figure 15 functions both as a fast food dissection and ingredient label image, but also a part of Hari's early anti-corporate activism. The linked petition was successful in getting Subway to change their bread recipe to eliminate ADA (Storm, 2013). In this instance, Food Babe recommended a concrete step for her followers to take: sign a petition. This is one of very few times that Hari makes such a concrete recommendation. She usually only tells her followers to avoid certain additives or boycott fast food establishments, but here she has a material action that her followers can (and did) participate in. This is an important strategy, especially for early Food Babe, because it proves to her followers that she is not merely a fearmonger but is actually making changes to corporations "one ingredient at a time."

Black and White Images

This second type of image post Food Babe uses to construct herself as a pseudotechnical expert consists of simple black text over a white background, and states some short claim about food or food additives. Usually these images contain simple statistics or factual statements such as Figure 16 (Food Babe, 2018) which claims that "1 in 13 children have food allergies" or Figure 17 (Food Babe, 2018) which asks what food additive is in 80% of packaged food. The reason I have chosen to separate these images out as their own category, though, is that this is one of the few places where Food Babe invites direct participation from her audience.

Figure 16: Food Allergies

1 in 13 children have food allergies.



Note that in the caption of Figure 16 Food Babe asks her followers what they believe to be the reason for the rise in food allergies. For now, I will ignore the fact that the claim "1 in 13 children have food allergies" is not the same as saying that there has been a rise in food allergies, and instead focus on the fact that Food Babe has posted an open-ended question and thus invited wild speculation from her followers. The comments on this post theorize that food allergies are on the rise due to vaccines, genetically modified foods, global warming, and even chemtrails. None of the commenters cite any scientific evidence for their speculations, but they do not have to. Food Babe is not asking her followers to research why food allergies are on the rise (if

that even is the case) she is only asking them "what do you think?" In phrasing the question this way, she not only invites a wide range of answers, but she divorces herself from having to respond to any commenter in particular. Although her followers do not provide any evidence that global warming or chemtrails are the cause of food allergies, they do not have to. Because Food Babe only asked her followers what they believe, she has no responsibility to correct them.

Additionally, because Food Babe invites such wild speculation on her posts, and because she is seen as an expert by her followers, such comments are able to be perceived as normal parts of scientific discussion. Food Babe is not reviewing scientific or medical data about why there has been a rise in food allergies, or why this particular statistic proves that the claim of a rise in allergies is true, but is instead crowdsourcing information from her followers. Comments on Food Babe's posts do not require evidence, and are largely individual opinions and beliefs, but because they are used in responses to scientific questions such as "what do you think the reason is for the rise in food allergies," they are allowed to be taken as scientific claims.

Figure 17: What Additive?

80% of packaged food contains what food additive?

Food Babe You work out. You try to eat a healthy diet. And you do your best to avoid bad additives in your food Meanwhile, your favorite pants don't fit, you feel tired all the time, and you're moody. What gives? told are good for you are actually flooding your body with a substance that is sabotaging all your hard work! That substance is SUGAR, It goes by 80% of the food at an average grocery store. Take a look at some of your favorite foods stocked in your kitchen. The industry adds sugar because they know it's ADDICTING and it's a cheap way for them to hook us on their products. And are we ever! Sugar and drug addiction are similar in many ways... Eating sugary foods leads to frequent cravings and withdrawal symptoms... along with its side effects like weight gain, horrible skin, and low energy levels. It's infuriating, isn't it? The most effective way to break a sugar addiction is to detox, and the Food Babe team created this effective (and quick!) step-by-step plan that makes

Figure 17 follows a similar form, though in this instance she asks the question directly within the image. Though she does not cite any evidence, presumably it would be verifiable somewhere that 80% of packaged food does in fact contain added sugar. In this instance she is not inviting the same wild speculation from her followers, but she is still inviting participation by phrasing her claim as a question rather than factual statement. Though it is not included in the Figure 17 screenshot of her post, Food Babe goes on in this caption to ask her followers if they know anyone who eats too much sugar or if they have noticed side effects in themselves after consuming too much processed food. Additionally, though the caption for this post is much longer than her captions typically are, there is still little to no technical explanation about the dangers of added sugar. Food Babe concludes this post with a link to a sugar detox program that she sells on her website indicating, once again, that her mission is to sell products not merely to promote awareness. She exploits her followers not only so they will believe

that her *Food Babe Way* is scientific truth, but to convince them that the only way to truly be healthy is to buy her books and products.

Conclusion

Food Babe has a unique ability to function as a pseudo-technical expert. Not only is she a perfect example of the fears Goodnight (1982) described regarding the decline of public sphere deliberation, but she has become immensely influential as a pseudo-scientific activist. She is perhaps entirely unique in her ability to simultaneously function as both a personal and pseudo-technical expert. Her followers perceive her as an expert who can and will tell them the real truth about what is in their food and, at the same time, as a beautiful and healthy mother who just wants the best for her kids. This has allowed her to advance largely unsubstantiated claims about the danger of chemical additives and malice of food corporations.

Food Babe has used this hybrid position to influence companies to change things about their food products, to provoke fear in her followers by telling them that chemical additives are dangerous, and to sell her own Food Babe approved products. Her massive support and following prove that her strategies are working. As stated in Chapter 1, she is the most followed food activist on social media, her *Food Babe Way* book was a national bestseller, and her new Truvani product line sold out within minutes of its release. Additionally, as described in Chapter 3, no one has been able to successfully respond to her. In the following chapter, I argue that one of the primary reasons past attempts to respond to Hari have failed so dramatically is that no one has been able to

operate simultaneously within the personal and technical spheres as successfully as Hari.

CHAPTER 5

BEYOND SPHERES OF ARGUMENT

The focus of the past two chapters has been establishing Food Babe as an expert within the personal sphere and a pseudo-technical expert. In both of these instances, Food Babe uses both verbal and visual arguments to establish herself as a mother, as a beautiful and healthy woman, and as someone who has successfully pressured the food industry to remove dangerous chemicals from processed food products. However, it is not the case that Food Babe is isolable to either the technical or personal sphere alone. In fact, many of her seemingly technical arguments rely heavily on personal sphere evidence, and she uses her position as a mother to justify wild speculation about food and nutrition science.

In this chapter, I synthesize the analyses from Chapters 3 and 4 to explain how Food Babe transcends the spheres of argument by using personal evidence to justify technical claims and vice versa. I begin by revisiting the research questions posed in Chapter 1. Next, I argue that Food Babe's ability to shift in and out of spheres of argument, and thus constantly change standards of argumentation, insulates her from criticism. As a part of this analysis, I outline possible strategies for critics who hope to respond to Food Babe. Finally, I expand on Goodnight's theory of spheres of argument and offer directions for future research in this area of argumentation studies.

Revisiting the Research Questions

This project set out to answer the following two research questions:

RQ1: How does Food Babe position herself as an expert in both the technical and personal spheres?

RQ2: How does Food Babe use visual arguments to strengthen her positions within the technical and personal spheres?

Each of these questions guided the analysis of Food Babe as a rhetor, her argumentative strategies, and her use of visual argument on social media.

RQ1 is answered by the analyses in both Chapters 3 and 4. Food Babe is able to be perceived as both a technical and personal sphere expert because she consistently uses strategies from both spheres of argument throughout her various forms of activism. Though I have defined Food Babe as a *pseudo-technical* expert as opposed to a *technical* expert, her followers still perceive her to have genuine technical expertise. Her Food Babe Army does not seem to care that she has neither scientific training nor evidence because they seem to believe Hari is the only person telling them the real truth about the food industry and because they see that she is beautiful and healthy, and the mother of a beautiful and healthy child.

This leads me to RQ2. Without the use of images, particularly personal images as analyzed in Chapter 3, Hari would not be able to function as both a personal and pseudo-technical expert. She uses her body and her child's body as evidence for her health and nutrition-based claims and, at least for her followers, that is enough. Hari

also uses seemingly technical images, such as photos of food labels, fast food dissections, black and white images with factual statements, and memes as evidence for her more technical arguments. These images function as proof that there are dangers in everyday food items that are hidden in technical-sounding chemical names and in the fine print on food labels. Hari posts these images both to show that she is an expert in reading and interpreting labels and telling the truth about ingredients, and to prove that food companies are lying about what is in their food. This is especially true of the ingredient label images she posts highlighting ingredients such as "natural flavoring" or other additives that sound benign but that she claims are very dangerous for consumption.

Using images as proof of her arguments means Hari is less responsible for citing scientific evidence. She is able to use images (both of food labels and her/her child's body) as proof of her claims without explanation. Ingredient labels prove that there are hidden dangers in everything we eat, and images of Hari's body prove that following her *Food Babe Way* will make everyone healthy and beautiful.

Beyond Goodnight

In his original essay, Goodnight (1982) claimed that "the standards for deciding which events fit into which spheres are . . . ambiguous" (p. 200) and that the placement of an argument into one sphere or another is not necessarily given. However, there are still argumentative standards that distinguish the three spheres. As described in Chapter 2, the standards of the technical sphere are the most rigid with clear guidelines for what

counts as evidence and who gets to be called an expert, whereas argument in the personal sphere allows personal anecdote as evidence and the standards for evaluating what is a good argument will change based upon the context and content of arguments presented. The public sphere consists of those issues that transcend either the personal or technical spheres alone, and the argumentative standards are strict enough to allow for evaluation of claims but not so strict that participation is limited.

It is not the case, though, that arguments will cleanly fall into one sphere or another. Though argumentative norms guide each of the three spheres, few arguments follow the criteria as laid out by Goodnight closely enough that they can be placed cleanly into a single sphere of argument. However, though it is the case that the "standards . . . are ambiguous" (Goodnight, 1982, p. 200) for figuring out which spheres arguments fall into, Food Babe seems to take this ambiguity a step further than Goodnight anticipated.

Although Goodnight (as well as Rowland, 2012; Zarefsky, 2012) argues that the placement of an argument within one sphere or another may change depending on time, place, and who is placing arguments within spheres, nowhere does he seem to recognize the possibility of arguments or arguers simultaneously existing within multiple spheres. He claims that placement into a one sphere or another may be contested, but he does not suggest that an argument can simultaneously be personal and technical. It seems, though, that the effectiveness of Food Babe's arguments comes from her ability to operate in both the personal and technical spheres at the same time.

Though I have argued that Hari exits within both the technical and personal spheres, there are times in which she simply imports pseudo-technical argument into the personal sphere. In these cases, Food Babe is still operating outside of the traditional spheres of argument framework because Goodnight never suggested that technical argument was a legitimate personal sphere strategy. Additionally, because Food Babe's followers perceive her as an actual technical expert, rather than a pseudo-technical expert, she is able to be perceived as operating in the technical sphere even if she is in fact only mimicking technical argument.

Chapter 3 established that Food Babe primarily relies on her rhetorical position as a beautiful, healthy mother to establish credibility, and Chapter 4 described Food Babe as a pseudo-technical expert. In both chapters, it became clear that Food Babe is not isolable to either the personal or technical spheres, and that she consistently uses evidence from one sphere to justify claims within another. In particular, Food Babe uses personal sphere expertise, and the fact that she has established herself as a maternal expert, to legitimize technical claims.

This goes beyond the literature on maternal expertise (Whidden, 2012; Archer, 2015). Though Whidden (2012) described maternal expertise as the ability to use evidence from one sphere to advance claims within another, usually in the form of personal evidence being used to advance technical claims, Food Babe seems to be doing something slightly different. Not only is Food Babe using her rhetorical position as a mother to legitimize her position in the technical sphere, but she seems to be using her

established persona as a pseudo-technical expert to further establish her maternal expertise and her position within the personal sphere. She wants her followers to understand that she is the only one looking out for the safety of their children, and the only one who understands the true dangers of chemical additives because she has done the technical and scientific research necessary to tell her followers the truth. The fact that she has extensively researched chemical additives, and is constantly searching for the "truth about what's really in your food" (Hari, 2018b), proves that she is not just a mother but a *good* mother. She is looking out for the safety of her child, and other's children, more than any food corporation or scientist ever has or will.

There are a few places that this happens. First, before Hari had her own daughter she would use images of other people's children as proof that her strategies and recommendations are family-friendly. By doing this, Hari was able to access maternal expertise despite the fact that she was not herself a mother using only the evidence of children eating healthy, organic, Food Babe-recommended food items.

Because some mothers trust Hari to make decisions for their children, she is credible.

Second, particularly with her ingredient label image posts, as seen in Figure 11, Hari often talks about the dangers of food additives in terms of their health effects on children. She capitalizes on the fear of mothers by claiming that foods advertised to children are dangerous or should be avoided (Archer, 2015), but almost never provides scientific evidence as to what those dangers or reasons for avoidance are. At best, she claims that color dyes in food items will cause children to become addicted to processed

sugar at an early age, but still she is advancing a largely personal claim (parents should not let their children eat X additive) by using seemingly technical evidence (X additive is medically dangerous).

This means that Food Babe not only explodes the technical sphere by positioning herself as a pseudo-expert but she explodes the personal sphere by integrating seemingly technical argument into personal discussions. This two-way integration is different from anything described by Goodnight. Most of Goodnight's (1982, 2012) concerns about the integration of argument spheres stem from the decline of public dialogue in favor of personal or technical sphere deliberation. He believed that the public sphere is in decline both because technical evidence is becoming more accessible to people, and therefore everyone believes they are an expert, and because there has increasingly been a celebration of personal lifestyle. But, again, Food Babe seems to be capitalizing on something other than encroachment into public dialogue. She simultaneously uses personal evidence to advance technical claims and pseudotechnical evidence to advance personal claims. This is distinctly different from what Goodnight described as public sphere deliberation.

Goodnight's original description of the public sphere is that it includes arguments that go outside of either the personal or technical spheres alone and does not contain its own specific argumentative practices. If this is the only description of public sphere argument, it would seem that Food Babe is the perfect public figure, and neatly fits within the public sphere of deliberation. In many ways, this assumption is

correct. She does not adhere to the evidentiary standards that are characteristic of the technical sphere, but her arguments are never intimately decided between individuals and the content and context almost never change. She is clearly not a technical expert because she has no scientific or technical training, and she never engages with her critics, but her followers almost universally perceive her as such. At the same time, her argumentative strategies are deliberate, intentional, and consistent across time and medium, which means she is doing much more than is characteristic of the personal sphere.

What, then, is Food Babe? She is not a technical expert. She is not a personal sphere rhetor. She is not a public figure. She seems to be using argumentative strategies from all three spheres at the same time without much regard for how they will be evaluated by her audience or expectations for responses to criticism. Food Babe somehow participates in all three spheres of argument, and none of them. Yet, she is one of the most successful food activists of our time (Godoy, 2014; Time, 2015). Her audiences believe that she is knowledgeable about food corporations, ingredients and additives, weight loss, and recommendations for children, and they seem to entirely trust her expertise. This is evidenced by the sheer number of followers she has as well as the fact that her *Food Babe Way* book was a bestseller for months, and all of her supplement brand products sold out within hours of being released. The fact that she operates on social media, which uniquely blurs the boundaries between the three

spheres, assists in the ability of Food Babe to present herself to her followers as a technical expert without the responsibilities of technical sphere argumentation norms.

The best answer I can provide to the question of "what is Food Babe" is that she is a pseudo-technical expert who functions primarily under the norms of personal sphere of argumentation. It may seem contrary to Goodnight's description of the spheres of argument to claim that she is a technical expert who operates in the personal sphere, but I think all of the analysis done in Chapters 3 and 4 supports this claim. Food Babe uses seemingly technical evidence, such as chemical names and scientific terminology, to advance claims about weight loss or children's health and nutrition. She uses her position as a mother to legitimize her lack of evidence, but, at the same time, she uses pseudo-technical evidence to cement the fact that she is a mother and that she is consistently doing the best possible thing for children. The Food Babe Way she promotes is based on factually incorrect scientific information, but she promotes it as though it is the truth, and her followers believe her. Each of these descriptions also assists in further elaborating an answer to RQ1, Food Babe is able to simultaneously operate within both the technical and personal spheres and be perceived by her followers as an expert in both.

Responding to Food Babe

Food Babe's resistance to traditional argumentative forms is perhaps the primary reason that critics have had such a difficult time responding to her. Because she

does not cleanly fit into one sphere or another, there is no clean argumentative strategy for answering her.

In many ways, it does not matter that Hari rarely engages with her critics.

Because she is not functioning strictly within the technical sphere of argumentation she is not required to do so. Additionally, because there are fewer argumentative norms for responding to attacks within the personal sphere, Food Babe is not required to engage with personal attacks against her. In the public sphere, there are fewer expectations for engaging with critics than there are in the technical, but Hari is also not necessarily functioning within the public sphere so she is not required to respond to public attacks either.

One of the most powerful aspects of Hari's rhetorical position is her ability to dodge all forms of criticism. She does not have to respond to factual claims because she is not claiming to be a scientist and therefore is able to divorce herself from the responsibility of participating in traditional technical argument. She will often cite the disclaimer on her website that what works for her may not work for everyone, and she reduces medical information to a matter of opinion, therefore disregarding technical criticism. At the same time, she avoids response to personal attacks simply by refusing to acknowledge them (with one notable exception, as described in Chapter 3).

Many have tried to respond to Food Babe in the past. These attempted responses have come in the form of competing social media accounts such as those operated by Science Babe, Math Babe, SciBabe, and Food Hunk. There have also been

more traditional technical responses such as the book released by Alsip, Senapathy, and Draco (2015) that systematically responds to Hari's *Food Babe Way* book. Numerous research scientists have spoken out about the danger of Food Babe's particular form of activism and food and nutrition experts almost universally reject the *Food Babe Way* diet plan.

Most of these responses function within traditional technical sphere discourse. Each of them address factual claims about Hari's diet plan, the ingredients she criticizes, or her supplement products. Hari's respondents always cite scientific studies (usually multiple) and are very systematic in how they respond to Hari's claims. However, because Hari does not function neatly within the technical sphere, she is able to simply refuse to respond to these challenges. She uses personal anecdote as evidence that her strategies work for her, and claims that if they do not work for everyone that must be simply because not all bodies function the same way. She consistently claims that she is the only one telling her followers the real truth about the food industry, and is thus able to dismiss criticism from scientists as being only a part of the "big food" conspiracy to keep truth-tellers like Hari silent.

Hari is also able to dodge technical critiques because she largely argues on social media, and the attacks that are leveraged against her usually take place within Facebook comments or shares of her original posts. Not only does social media generally function under the norms of personal sphere argumentation, but platforms themselves structurally encourage disengagement. Deleting comments or shared posts is incredibly

simple, and is often easier than responding, and once deleted there is little traceability of comments or posts.

All of this is to say that the most important aspect of responding to Food Babe is not fact checking her. Though it is important to reiterate that Food Babe is scientifically wrong about many of her recommendations, the more critical aspect of responding to her is establishing oneself as a credible personal sphere expert. So much of Food Babe's rhetorical power comes from her ability to establish herself as a mother, and therefore as credible to other mothers. Food Babe uses her body and her child's body as evidence that her Food Babe lifestyle works and she relies heavily on personal photos as proof that she is telling the truth about health and weight loss strategies. It is not the case that the Food Babe Army follows Hari only because they believe she is scientifically correct (although many do seem to believe that she is) but because they trust her as a rhetor because she has taken time to prove that she is credible. A large part of this success, as addressed by RQ2, is Hari's use of personal photos, both of herself and her daughter.

Some of the social media accounts that respond to Hari attempt to establish personal sphere personae, but none of them come close to the level of success Hari has achieved. For example, Science Babe often shows images of her own children associated with captions about why she vaccinates or why she is comfortable feeding GMOs to her children. However, unlike Food Babe, these images are few and far between. Science Babe, much like other respondents, generally focuses on fact-checking and attempting to disprove factual claims about Hari's activism.

Conclusion

Though Goodnight's theoretical framework is a useful descriptive tool, I am not sure the usefulness of maintaining separation between spheres of argument. Goodnight does not claim that the separation has to remain strict, or that the usefulness of his theory comes from the ability to name which of the three spheres an argument falls within, but the conclusion of his theoretical analysis is that publicity needs to be preserved through reaffirmation of the norms of the public sphere of deliberation. Yes, there are different standards for evaluating technical versus personal debates and, yes, public discourse is perhaps eroding due to both a decrease in the value of technical expertise and an increased obsession with our personal lives but I am not sure that the goal should be preserving separation for separation's sake.

My intention is not to reject the usefulness of understanding the argumentative differences between technical, personal, and public argument but to question whether the goal of such descriptions should be the isolation of the public sphere. I believe that the objective should be determining how and when technical and personal discourse should be reinserted into public dialogue, and how best to maintain the sanctity of argument types without entirely isolating them from one another. This is not a new idea, and has been worked on by many theorists including Fabj and Sobnosky, Whidden, Zarefsky, Rowland, and others (as described in Chapter 2). Each of these theorists claim that isolation of the public sphere may be useful in some instances, but that there are numerous exceptions to the rule of separation.

This analysis of Food Babe offers a useful extension to existing scholarship.

Though others have described the usefulness of technical or personal dialogue in public deliberation, no one has yet described anything like Food Babe's duality within the technical and personal spheres or the ability to use evidence across spheres to strengthen positions in both. Hari's ability to cut across spheres is, I believe, somewhat unique.

This is a different argument than Goodnight's original concern about the erosion of public dialogue. Food Babe complicates the spheres of argument framework not because she inserts technical or personal dialogue into public deliberations, but because she simultaneously uses personal evidence to legitimize her pseudo-technical expertise, and vice versa. She uses evidence from both the technical and personal spheres indiscriminately to establish herself as what I call a pseudo-technical expert who employs primarily personal sphere argumentation strategies. Chapter 3 described her use of personal evidence, and Chapter 4 described that she is a pseudo-technical expert, but I do not believe that these positions are isolable. Instead, she uses her position as a mother to strengthen her position as a pseudo-technical expert, and she uses scientific language to establish herself as a good, credible mother.

This also means that public dialogue, as advocated by Goodnight in both his original 1982 articulation of the spheres of argument and his 2012 update, will be insufficient to answer someone like Food Babe. Her rhetorical position is not problematic because she is encroaching on public dialogue but instead because she

seems to entirely break the conception of spheres of argument altogether. She is not operating in one sphere or another but is using arguments from all three spheres simultaneously. This argumentative shiftiness has allowed her to operate as a pseudotechnical expert without the responsibility of adhering to the norms of the technical sphere of argumentation.

Future research into the spheres of argument ought to analyze the relevance of this theoretical framework and the importance of maintaining distinctions between spheres of argument. Food Babe proves that Goodnight's concerns are valid, but a simple rejection of spillover between spheres will not lead to the best possible public dialogue. Instead, we should work to determine how and when personal or technical claims are warranted in public dialogue and develop a framework for evaluating such arguments in public.

In many ways, Food Babe is a brilliant rhetor. She has figured out how to seemingly operate within all three spheres of argument simultaneously, but avoid the responsibility of adhering to the argumentative norms of any one of them. She functions primarily as a pseudo-technical expert, meaning that she should have to adhere to the norms of the technical sphere, but her patterns are much more typical of the personal sphere. Because of this, she is able to brush off all criticism and maintain credibility with her followers despite being factually incorrect about most of her recommendations. Few other public figures are able to operate in this dual position within the technical and personal spheres, which means that not only is Food Babe an interesting artifact for

analysis, but she presents a new rhetorical challenge to scientific expertise in the public sphere. Figuring out how to respond to Food Babe (and the inevitable others that will follow in her footsteps) will take time, but this introductory analysis into the strategies Food Babe has used to become one of the most successful food activists of our time is an essential first step.

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