THE DRAMA OF BIOTERROR: PARANOIA AND THE RHETORIC OF DEFENSE

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This study provides an account of how a rhetoric of bioterrorism developed and investigates its consequences. Currently, two competing ways of talking about bioterror, the skeptical and the paranoid, have been obscured because biosecurity researchers infrequently consider how particular historical and imagined events come to be defined as examples of bioterrorism. These rhetorical styles and their associated attitudes responded to a recurring problem in the history of biothreats – that there is rarely enough evidence to give clear accounts of the presence and origin of particular threats. As a result, conjectures become part of a unified history of bioterror, washing out the actual complexity of describing these rare events. The ease with which events of the late twentieth century are reimagined in the terms of the twenty-first century war on terror as well as the propensity for furious legislative and media response to the threat of bioterror allows real and imagined bioterror to capture a special place in the popular imagination. Bioterror taps into a problematic narrative that has structured the United States' relationship with biological weapons since the 1960's. To make visible these competing attitudes, this dissertation considers how acts of defining operate as rhetorical processes and how this process became exploitable in the specific case of biological terrorism. To that end, three major cases are considered: (1) President Richard Nixon intervened in a public, political debate about the dangers of biological weapons testing though an act of redefinition by which he renamed the US bioweapon program from "weapons development" to "defensive research" and successfully shifted from a rhetoric of offense to a rhetoric of defense with lasting consequences; (2) Biodefense experts in the 1990's redefined a nationally obscure salmonella outbreak in the 1980's as the first bioterror attack on American soil; (3) Following the 2001 anthrax mailings, the FBI defined a government scientist as an object of suspicion, Othering him to the point of suicide.

Table of Contents

List of Figures

Preface

I came to this project almost entirely by accident. In 2010, I began a small interview project with my grandfather, Dr. Charles H. Kingsolver, as part of Ron and Mary Zboray's graduate seminar on Oral History. After returning from the Pacific after World War II, he worked at Fort Detrick as a plant pathologist and bioweaponeer. His research group was tasked with answering two key questions: (1) can biological war be waged against crops and (2) what can we do to protect ourselves against it? As I learned more about his work at this strange boundary between science and war, I became fascinated with how he understood his complex roles and responsibilities. In order to understand his work within the context of his own time I busied myself reading and watching any and all public representations of biological weapons that I could find during the period of time that he was active: the 1950's to the 1980's. However, as I began to consider secondary literature from the late 1990's and beyond, I was continually driven into work concerned not with biological weapons writ large, but biological weapons as a relevant problem for bioterror studies. Further, I was struck by the ways in which contemporary biosecurity scholars used events in the past to imagine related threats in the future.

At first I thought that this must be an obvious consequence of the heightened anxiety about terrorism after 9/11, but that changed when I discovered the Rajneeshee "bioterror attack." According to many contemporary bioterror histories, the first successful bioterror attack on American soil happened in 1984 when a small group of members of the Rajneeshee cult poisoned a small town in Oregon. By the time I discovered the case I had already built up a bibliography of the biological weapons coverage in several major national newspapers, yet I knew nothing of the case. Where had my methods gone wrong? At what point had this event

entered into the history of bioterror? When did the 1980's become populated by terrorists? How was this retrospective population carried out? Contrary to my previous assumption, the inflection point was not *merely* 9/11, though surely the war on terror had dramatic effects on bioterror talk. Thus, I began a series of related investigations that are now collected together in this dissertation.

Before his death, my grandfather was deeply concerned that twenty-first century Americans were disconnected from the history of the US bioweapons research programs and, thus, could not helpfully think about the issue. I have come to share his worry at least in spirit. It is not enough, I think, to recover scientific, technical, and political histories about biological weapons. If we are to make sense of catastrophic biological risks in the twenty-first century we need to pay careful attention to how history has already been recovered. The politics and history of bioweapons are already present in the way we talk about biological risks. This dissertation is an attempt to make those ways of talking visible so that we might decide together how to talk about terror, biosecurity, and risk.

Were it not for the seminars and conversations at Pittsburgh, this dissertation would never have germinated and developed. For that reason, I am indebted to the teachers who so influenced my thinking and provided the intellectual resources to conceive of and carry out this project. To that end, thankful acknowledgements are due to Gordon Mitchell, for always making the weaker argument stronger; Heather Douglas, for making Philosophy practical; John Poulakos, for insisting on impracticality, indulgence, and drama; Olga Kuchinskaya, for always turning my attention toward power; and John Lyne, for always countering tragedy with comedy and rush with rigor. Thanks also to Brent Malin and both Ron and Mary Zboray in whose classes

this project was first born. Without any one of these influences, this project would have been either very different or simply not at all.

Without both friends and family getting into and through graduate school would have been far more difficult. Both Jon Rosenberg and Ethan Stoneman were kind enough to entertain my ideas as well as my complaints. Thanks to my Mom, my first science teacher, who encouraged me along and insisted that I did not dally. My sister Megan did the same by example. Thanks also to my Dad who, while in Pittsburgh, did everything he could to help me feel at home. My new family too, Grizzards and McDermotts, have treated me as one of their own in every way possible. In sum, I count myself one of a lucky network of scientists and philosophers.

I lack the words to express appropriately how important my wife Julia has been through all of this. She encouraged and supported me as I applied, helped conceive of the interview project which gave birth to this dissertation, and took care of me throughout my challenges as a student. I would not have made it here without her nor would I have ever learned to read *Republic* correctly.

This dissertation is dedicated to Dr. Charles Huston Kingsolver, my grandfather.

1.0 DEFENDING AND DEFINING

> (5) the term "domestic terrorism" means activities that—
>
> (A) involve acts dangerous to human life that are a violation of the criminal laws of the United States or of any State;
>
> (B) appear to be intended—
>
> (i) to intimidate or coerce a civilian population;
>
> (ii) to influence the policy of a government by intimidation or coercion; or
>
> (iii) to affect the conduct of a government by mass destruction, assassination, or kidnapping; and
>
> (C) occur primarily within the territorial jurisdiction of the United States.
>
> – U.S. Code of Justice § 2331

> Bioterrorism is the unlawful use of bacteria, virus, fungi, toxins, or other pathogenic materials against the population, government, agriculture, husbandry, and general industry. Although most scholars, experts, and professionals concerned with terrorism and counterterrorism understand the true meaning and consequences of the actions underlying this definition, the same cannot be said about the general public. For the general population the definition of bioterrorism is shaped by the images of infected people in hospitals and on TV screens, which can raise the strategic value biological weapons can present to terrorist groups.
>
> -Francisco Galamas, *Profiling Bioterrorism* 2011 [1]

Those given the authority to name certain individuals as bioterrorists and certain events as bioterror attacks wield immense power and, through those acts of naming, can bring to bear the full force of both public health and law enforcement. Individuals with this power to name can make us feel safe or afraid, but, in either case, citizens feel the effects. Because of this, we should be concerned with how particular historical and hypothetical events come to be defined as

[1] Francisco Galamas, "Profiling Bioterrorism: Present and Potential Threats," *Comparative Strategy*, 30, no. 1 (2011): 79.

examples of bioterrorism. The primary argument of this dissertation is that the contemporary use of the term "bioterror" in political and popular narratives tends to obscure the complex rhetorical work done to populate the related categories of bioterror and bioterrorist. As a result, these powerful terms can be used in a way that hides the values and perspectives that might be built into them, closing them off from inspection and criticism. In what follows, I provide the context and the point of departure for this investigation.

According to both the US Code of Justice and contemporary security researchers (such as Galamas, above), there is a category of criminal acts so heinous that, by virtue of a unique combination of material conditions and psychological motivations, must be called terrorism. The presence in the world of certain technologies like weapons of mass destruction and certain kinds of people who wish to intimidate and coerce puts us at great risk. Even worse, it would seem that recent history and the current analyses of biosecurity shows us to be tragically unprepared for attacks of this nature. The PATRIOT Act of 2001 contained a section (Title VIII) that was designed specifically to strengthen the criminal law in the US Code against acts of terror – the above definition of "domestic terror" is one such addition.[2] Further, when Quinnapiac University surveyed voters in 2013 and asked them about the appropriate penalty for a person convicted of murder, "voters choose the death penalty [over life without parole] 48 - 43 percent. These same voters favor the death penalty 63 - 32 percent for someone convicted of murder during an act of terrorism." [3] Absent other details about the situation, many voters estimate that terrorists should face harsher penalties – the harshest penalties the US justice system allows for. Consequently, those within the American justice and security apparatus who are given the

[2] *Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism (USA PATRIOT ACT) Act of 2001*, Public Law 107-56, U.S. Statutes at Large 115 (2001): 272-402.

[3] Quinnipiac Polling Institute, "Hillary Clinton Owns 2016 Dem Nomination, Quinnapiac University Finds" Poll, May 2, 2013, accessed November 30, 2014, http://www.quinnipiac.edu/images/polling/us/us05022013.pdf.

authority to speak definitively about bioterrorism carry much responsibility and power. Their ability to find bioterrorists before they attack and punish them if and when they do anything have serious stakes.

Even as voters seem prepared to punish terrorists, security experts like Galamas remain concerned that citizens lack the understanding necessary to authorize and support proper prevention and preparation for the terror threat. [4] In his words, they fail to, "understand the true meaning and consequences" of the category of events called bioterror attacks.[5] This conclusion seems premature given the substantial and valid criticisms of Biosecurity made by those like Mattea Kramer and Chris Hellman, analysts and authors of *A People's Guide to the Federal Budget*. By their estimates, the United States government has spent $791 Billion since 9/11 on "homeland security," a figure they find "jaw-dropping."[6] Lisa Keränen estimates that in response to bioterror alone, the US Government has spent about $40 billion.[7] By her calculations, this amounts to a proportional response of "$2 billion for each known victim of bioterrorism," and represents a "staggering increase" in funding.[8] What is particularly troubling for Keränen is the fact that much of this funding is devoted to biodefense research that is, in itself, quite dangerous, and so it would seem that talk about the possible disaster caused by a bioterror attack is capable of "licensing extraordinary cultural production."[9] Talk about bioterror

[4] Galamas, like many European researchers, is an academic (trained in International Relations) and also a public official (in Portugal's Office of National Defense). Many of the American and Soviet researchers cited in later chapters (Seth Carus, Josh Lederberg, DA Henderson, Ken Alibek, etc.) work near from similarly complex institutional positions.

[5] Galamas, "Profiling," 79.

[6] Mattea Kramer and Chris Hellman, "'Homeland Security' The Trillion Dollar Concept that No One Can Define," *The Nation*, February 28, 2013, accessed November 19 2014, http://www.thenation.com/article/173131/homeland-security-trillion-dollar-concept-no-one-can-define.

[7] Lisa Keränen, "How Does a Pathogen Become a Terrorist?" in *Rhetorical Questions of Health and Medicine*, eds. Joan Leach and Deborah Dysart-Gale (New York: Lexington Books, 2012), 85-120.

[8] *Ibid*.,78.

[9] *Ibid*.,91.

has immense consequences: biosecurity and biodefense involve a great allocation of money, dramatic live simulations, initiatives by pharmaceutical companies, and weapon experimentation. We should be concerned with whether or not such acts of power are necessary, lead to good consequences, and are carried out with care. Whether these massive expenditures, dangerous research programs, and fear-inducing simulations appear to be justified depends on the conclusions we draw about 'the true meaning and consequences of bioterror.' We should be, then, keenly interested in how the category of events called bioterror is constructed, defined, populated, and put to work in different contexts.

A vast literature exists on the history of bioterrorism and its relevant technologies, biological weapons, and much of that literature shares Galamas' claim that few outside the biosecurity community know enough about history, technology, and disease to grasp the magnitude of the problem.[10] Yet, Keränen is not alone in worrying over the scale and especially the nature of the reaction to the problem of bioterror risk.[11] This field of research, the intersection of biosecurity and critiques of it, provides a healthy debate in which one can find detailed histories of biological weapons programs as well as careful accounts of research programs in the United States which are intended to prepare us for bioterror and related biothreats. Where the current literature is limited, however, is in explicit treatments of how

[10] Some notable examples include Jonathan B. Tucker, ed., *Toxic Terror: Assessing Terrorist Use of Chemical and Biological Weapons* (Cambridge: MIT Press, 2000); Ken Alibek and Stephen Handelman, *Biohazard: The Chilling True Story of the Largest Covert Biological Weapons Program in the World-Told From the Inside by the Man Who Ran It* (New York: Random House, 2000); Gregory D. Koblentz, *Living weapons: Biological Warfare and International Security* (Ithaca: Cornell University Press, 2009); Daniel M. Gerstein, *Bioterror in the 21st Century: Emerging Threats in a New Global Environment* (Annapolis: Naval Institute Press, 2009); Jeanne Guillemin, *Biological Weapons: from the Invention of State-sponsored Programs to Contemporary Bioterrorism* (New York: Columbia University Press, 2005).

[11] Lynn C. Klotz and Edward J. Sylvester, *Breeding Bio-insecurity: How US Biodefense is Exporting Fear, Globalizing Risk, and Making Us All Less Secure* (Chicago: University of Chicago Press, 2009); Kenneth King, *Germs Gone Wild: How the Unchecked Development of Bio-Defense Threatens America* (San Jose: Pegasus Books, 2011).

meaning and definition are constructed in particular historical cases. That is, security researchers (hawks and doves) tend to use a pre-existing historical narrative about terrorism and a set of pre-established terms to study the series of events and practices that are implicated as relevant by that history and those terms. Even as some researchers are interested in considering generally the problem of definition,[12] there are few investigations into the way in which the aforementioned definitions and histories are built up and deployed.[13] Consequently, the ways by which we have come to our definitions and histories, especially particular bioterror cases, are especially obscured. That is, an event emerges as an event of a particular kind (an attack, an assassination, and accident, etc.). In real-time, however, definitions are often contested, negotiated, altered, and adjusted. All of these processes are inevitable and necessary parts of defining and persuading; defining is helpful exactly because it helps us move deliberation along. At some point in a particular deliberation we must stop arguing about definitions and begin arguing about quality and policy. We must agree on definitions in order to proceed. However, since our definitions will drive how we proceed we must remain interested in how we arrived at them. Our definitions are laden with attitudes, values, and perspectives and we should remain keenly aware of which attitudes, values, and perspectives that we promote and act from. Therefore Galamas is right to be concerned about the non-expert understanding of bioterror, but his concern over the "true meaning" may lead his inquiry in unhelpful directions. We should be skeptical as to whether it is desirable (or even possible) to speak intelligibly about "true meanings" when it comes to definition. Thus, as a friendly amendment to Galamas, I suggest we abandon an inquiry into the

[12] W. Seth Carus, "Bioterrorism and Biocrimes: the Illicit Use of Biological Agents Since 1900," (Working paper, National Defense University, Washington DC, 2001), accessed November 30, 2014, http://www.dtic.mil/dtic/tr/fulltext/u2/a402108.pdf.

[13] The notable exception being Joseph S. Tuman, *Communicating terror: The rhetorical dimensions of terrorism* (Washington, DC: Sage, 2009). Tuman, however, is concerned with terrorism generally and offers no distinct or focused consideration of biological terrorism.

what of bioterrorism and instead pursue an investigation into the *how*. How are cases of bioterror identified and named? How are definitions applied and negotiated? How have history, culture, and politics played a role in these cases? Which attitudes, values, and perspectives have been put to work within the terms and narratives about bioterror? To this end, I suggest an inquiry into several critical episodes of definition in the history of bioterror, not to seek a definition per se, but to build a history or genealogy of definitions of bioterror.

Thankfully, these and related issues have been quite well studied in the related field of missile defense, especially with respect to nuclear weapons. In 1987, Carol Cohn made an in-depth study of how nuclear defense intellectuals defined nuclear threats and prescribed the necessary responses to them.[14] In her investigation, terminology and those authorized to use it played an important role. Cohn argues that those researchers had inadvertently created a way of defining and responding to nuclear threats that primarily legitimated the further development and possession of nuclear weapons. Since there was only one legitimate, accepted way of talking about nuclear weapons, certain perspectives were difficult or even possible to speak from. Through abstraction and euphemism, the defense intellectuals spoke of "clean bombs," "damage limitation weapons," "surgical strikes," and "collateral damage."[15] As a result, it became easy to describe and justify the use of nuclear weapons without ever talking about the humans on whom the bombs might be dropped – in fact, in this language it is the weapons that get personified, "carried," "born, and "delivered."[16] In showing how their language and terms made it possible to convert the objectionable into the sanitized (i.e. nuclear missiles as "clean bombs" and "damage limitation weapons") and ruled out the relevance of certain concerns (i.e. human

[14] Carol Cohn, "Sex and Death in the Rational World of Defense Intellectuals," *Signs* (1987): 687-718.
[15] *Ibid.*,691-692.
[16] *Ibid.*

suffering as "collateral damage"), Cohn demonstrated how technical language can affect and constrain deliberative possibilities.[17] Thus, when experts have the authority to both define a problem and offer its solution, they create a closed loop which bars the input and intuition of non-experts who may be unhampered by technical vocabulary (or, at least, hampered by a different vocabulary). These closed terminological loops are problems not only for the thoughtful but unaware, but also for those who might fall prey to the intentionally deceptive arguments of nuclear experts interested in pushing forth some particular narrative.[18] Further, the problem is linked to a far larger question of how a thing gets named "nuclear" in the first place and how that thing is then transformed into a weapon.[19]

In order for bioterror to be defined helpfully, the history of research into and policy about biological weapons must be brought into conversation with the relevant aspects of the history of defining terrorism. When the histories of biothreats and terrorism intersect, both are reshaped. That is, when we begin to define certain uses of bioweapons as acts of terror we rename past events and add to the history of terrorism. This both repopulates the history of bioweapons with acts of terror and repopulates the history of terror with bioterror. This intersection and repopulation is influenced by narratives that spring from what I call the paranoid attitude: a way of speaking and acting that stands in contrast to skepticism and is motivated by suspicion. In a world filled with risks, it is often difficult to immediately arrive on a single explanation for a traumatic event. If I fall ill, where should I seek the cause? Perhaps I have eaten spinach that

[17] *Ibid.*,691.

[18] Whereas Cohn does not seem to think that (all) her defense intellectuals are abusing their power, other related treatments of missile defense policy are far more damning. See especially Gordon R. Mitchell, *Strategic Deception: Rhetoric, Science, and Politics in Missile Defense Advocacy* (East Lansing: Michigan State University Press, 2000).

[19] For a thorough treatment of the latter, see especially Gabrielle Hecht, *Being Nuclear: Africans and the Global Uranium Trade* (Cambridge: MIT Press, 2012). For the latter see, for example, Donald MacKenzie, and Graham Spinardi, "Tacit Knowledge, Weapons Design, and the Uninvention of Nuclear Weapons," *American Journal of Sociology* 101:1 (1995): 44.

was poorly washed. Even worse, my spinach may have been intentionally contaminated. Then again, I may have caught a common flu. Each of these is possible and, in that way, each is a response based on a real risk. Yet, each sees the world of risk in a different way. As I mean it, paranoia is a way of seeing which not only moves towards the conspiratorial and the sinister, but seems to do so even when others see no real evidence for such views. My inability to prove the existence of some terrorist will not keep existent-but-hidden terrorists from doing me in. What we call being overly suspicious, the paranoid calls simply being prudent. So it is with paranoia and both terror and bioterror. Every explosion might be a terror attack. Every important location might be a target. Every garage might house a terrorist.

Narratives related to terror and bioterror emerge from paranoid perspectives but are retrospectively historicized in a way that hides their original, paranoid character. When the paranoid turns out to be right, we tend to forget the original, paranoid character of his claims. To show how these narratives developed and were historicized, this investigation takes two tacks. First, it will be necessary to construct a rhetorical history of US bioweapon threats in order to show how, long before the war on terror, political and popular discourse shaped the relationship between the US and bioweapons, especially through what I call "the rhetoric of defense." Second, I show how events are recruited into the contemporary drama of bioterror through the definition and redefinition of past and present events. This is possible because the features of events in isolation lend themselves to different interpretations and are therefore insufficient for determining whether or not bioterror has occurred. Thus we find a contest for authority between experts over the definition of some actions, persons, or objects. In many cases the prevailing definition may seem on close inspection to be quite grotesque or absurd, and it may be that many of these consequences flow from legal and technical vocabularies which constrain deliberative

and narrative possibilities. Even as there may be no "true meaning," we can still make judgments about whether or not some group of experts developed good definitions within their own context (the evidence at hand, their duties, their cultural situation, etc.). Further, even if some group of experts developed good definitions within their own context, we may quite reasonably wish to discard their definitions today because of new evidence or a desire to work from a different attitude.

This first chapter lays the conceptual and terminological groundwork for the proposed investigation. Following Edward Schiappa, who argues that "definitional disputes should be treated less as philosophical or scientific questions of "is" and more as sociopolitical questions of "ought," I show how definition operates not only explicitly in definitive discourse, but also implicitly in narratives and abductive arguments.[20] What I hope to identify within the expert discourse about bioterror are two competing attitudes: the skeptical and the paranoid. As I explain in more detail, below, the skeptical and paranoid attitudes both respond to a basic problem within bioterror cases: the need for action in the face of incomplete and ambiguous evidence. This problem is not unique to bioterror (or even terrorism more generally) but the heightened stakes of bioterror combined with the importance of scientific forensics create a unique context in which extremely polarized conclusions about guilt are drawn, so extreme that they crowd one another out. Generally, these attitudes mark different tendencies toward and patterns of justification used to support particular definitions.

Further, I argue that definitive discourse about bioterror, insofar as it is possible, is particularly fraught and powerful for two reasons. First, it carries peculiar persuasive force because it is what John Lyne has called a bio-rhetoric: "a strategy for inventing and organizing

[20] Edward Schiappa, *Defining Reality: Definitions and the Politics of Meaning* (Carbondale: SIU Press, 2003): 3.

discourses about biology in such a way that they mesh with the discourses of the social, political, or moral life."[21] Second, there exists an important gap in bioterror definitions when it comes to the need to document intention – some definitions of bioterror seem to rest squarely on the biological materials of an attack whereas others rely on a particular psychological motivation. This gap is a challenge, because the former material-oriented definitions actually rely upon and are authorized by those who use the latter motivation-oriented definitions. As a result, there is no such thing as an 'underneath' to the definition of bioterror. There seem to be two, related definitions which rely upon one another and are put to work in difference contexts. The definitions stand together as a starting point for a kind of predisposing attitude whereby one is is either inclined or disinclined to see certain configurations of objects as weapons, certain attacks as terrorism, and certain individuals as active or incipient terrorists.

If intention is central to what counts as bioterror, bioterror can be more difficult to identify when a criminal or disease investigator comes upon a case. It will often not be clear from the material conditions and what motivations could have produced them and this complicates the task of assigning the evidence to a category. Just as a screwdriver might look suspicious in the hand of a person we find lurking in the shadows, a considerable variety of objects in the possession of a suspected terrorist will be worrisome. We often infer intent by behavioral context, but conversely, we often interpret context based on presumed intent. Starting with a strong predisposition on either side, therefore, could importantly predetermine the categorizing process in a way that we might, upon reflection, judge problematic. In both Chapters 2 and 3 I show how dead sheep and sick Oregonians with food poisoning are treated as proof of biological weapons and proof of 'natural' disease processes. Different experts will see

[21] John Lyne, "Bio-rhetorics: Moralizing in the Life Sciences," in *The Rhetorical Turn: Invention and Persuasion in the Conduct of Inquiry*, ed. Herbert W. Simons (Chicago: University of Chicago Press, 1990): 38.

different causes and this is not surprising. Under names like "trained incapacity" or "occupational psychosis," this practice of seeing what one is trained to see is well-known and often unproblematic.[22] However in the cases of interest in this investigation, these disciplinary ways of seeing are brought into public, political conversations. Further, we will find that individuals cannot simply be reduced to their disciplines because disciplinary training does not entirely determine perspective. Sometimes epidemiologists will see weapons and criminal investigators will see 'mother nature.' Below, I describe the necessary relationship between these two different tendencies and, in the chapters that follow, I describe how these attitudes can become out of balance with one another. Borrowing from Kenneth Burke, I will describe these tendencies as attitudes, ways of seeing and acting. Below I describe the two attitudes of interest to this investigation: the skeptical and the paranoid. When the balance between these attitudes becomes disrupted, toward skepticism or paranoid, the consequences are substantial. In the three chapters that follow, I examine a series of critical episodes in which different but related forms of these attitudes are at work. In each case, rich description and analysis will show that things and their definitions or labels do not rigorously match up. What is more important is showing the kinds of circumstances in which the definitive process may become out of proportion and thereby lose sight of utility. With this foundation laid, I consider in each of the following three chapters a particular definitive moment and investigate stories that circulate around an important piece of definitional discourse. In Chapter 2, the central definitive texts are President Richard Nixon's twin speeches given on November 25, 1969. In these two speeches – one given to the public and one given to the employees at Fort Detrick – Nixon announced the United States' renunciation of biological weapons. With this speech, President Richard Nixon intervened into a

[22] For a summary of these terms as used by Thorstein Veblen, and John Dewey, see Kenneth Burke, *Permanence and Change*, (Oakland: University of California Press, 1984): 37-49.

public, political debate about the dangers of biological weapons testing and dissolved the controversy by redefining the nature of US bioweapon research from a program of offense to a program of defense. This new policy carefully articulated the difference between possessing the materials of biological weapons and the intention to use those as weapons. By authorizing the former while condemning the latter, Nixon both opened the way for the US to sign the 1972 Biological Weapons Convention and created a paradoxical political environment in which the US could still legally research and possess the materials necessary for (and even equivalent to) biological weapons.

Nixon's policy describes a way of seeing the world which acts as a representative anecdote for the kind of paranoid attitude described above: while it is explicitly designed to make the world safer (and arguably has done so in some ways), it creates the conditions for the possibility for a novel type of paranoia. Prior to Nixon's new policy, it was possible for the government and the public to be worried about biothreats, but that worry was, as I show, imprecise and tended to gather together biological and chemical threats of both natural and military origin. This made it easy for both real and imagined examples of government negligence to be gathered together by politicians, who, through the press, mounted a massive public relations campaign against Nixon's biological and chemical warfare policies. In his response to the critics, Nixon authorized a version of that paranoid narrative in the name of deproliferation - a narrative I call the rhetoric of defense. Roughly, Nixon agreed with his critics that there was a vast biothreat worth fearing, but that biothreat was neither located within the military-industrial complex nor on American soil. In Chapter 3, I demonstrate the ambiguity of bioweapon materials by examining a serious but nationally obscure food poisoning outbreak that occurred in The Dalles, Oregon in 1984. The outbreak was initially believed to have been

caused by negligent food workers in a series of salad bars, but an FBI investigation eventually uncovered evidence that suggested that members of a local religious commune had intentionally contaminated the salad bars at several restaurants. During the 1980's, the case received very little national attention, and what attention it did receive focused primarily on the commune's strange, charismatic guru. The use of what could have been understood as a biological weapon was comparatively less remarkable. However, in 1997, epidemiologists who investigated the outbreak (Török et al.) published on the case and, in their case narrative, associated the outbreak with the then-recent chemical and biological attacks by the Japanese cult Aum Shinrikyo. Thus, I argue, the event is recruited into the history of bioterror by scientific investigators, but only with the authorization of criminal investigators. In their 1997 paper, the epidemiologists foreshadow future conflicts between experts when it comes to defining events as bioterror. Their sanguine view of the relationship between scientific and criminal investigators conflates two unrelated investigations, one criminal and one epidemiological, in a way that obscures the struggle to interpret scientific data that occurred during the 1980's. As a result, the epidemiologists quietly granted criminal investigators final authority to interpret the originally ambiguous scientific evidence toward paranoid conclusions.

I conclude Chapter 3 by considering the case of Steve Kurtz, a Professor and artist whom the FBI attempted to prosecute as a suspected bioterrorist because of materials found at his home. While Kurtz (and many others, including a Hazmat team) asserted the materials to be both harmless and educational, criminal investigators over a period of four years denied Kurtz's ability to account for his actions until, finally, a federal judge threw out the case. In hindsight, those investigating the Rajneesh seem to have made an obvious mistake. At the time of the original public health investigation, Congressman Jim Weaver argued that there was a

"madman" behind the food poisonings, but disease investigators had determined such a possibility implausible. In the end, the weight of the evidence against the poisoners elicited guilty pleas and a short trial. In the case of Steve Kurtz, investigators proved to be overly persistent and doggedly pursued Kurtz in the face of a variety of legal obstacles. Just as the epidemiologists were unable to find scientific grounds to suspect the Rajneesh in the 1980's, the FBI was unable to find a reason to give up their suspicions of Kurtz.

The above cases show the perhaps natural tendency toward skepticism by forensic scientists and suspicion by criminal investigators. Surely the two act as a corrective on one another, but, since they are not equally powerful within the justice system, it is difficult for the skeptical attitude to prevail once an event is named as a particular kind of criminal act. In Chapter 4 I examine a case in which a crime is identified at the outset. Following the 2001 anthrax mailings (a case referred to by the Department of Justice as "Amerithrax"), criminal investigators worked alongside scientific investigators in one of the largest and longest criminal investigations in US history. Their final suspect in the mailings was Dr. Bruce Ivins, a civilian scientist working at United States Army Medical Research Institute of Infectious Diseases (USAMRIID) at Fort Detrick. Thus, my examination both begins and ends at the doorstop of that facility. Decades after Nixon renounced biological weapons research, a comic irony unfolds: a powerful biological weapon was created inside a US laboratory and used to attack not only American journalists but also elected representatives at the Capitol. What unfolded was a struggle between criminal and scientific investigators over the interpretation of scientific evidence and the relationship between evidence about materials and evidence about motive. A narrative account of that struggle (written by the victors) is documented in the FBI's *Investigative Summary* of the Amerithrax case. Below, I demonstrate how FBI investigators

claim authority over material evidence by hypothesizing about Ivins' psychological motives. By articulating a winding, almost circular argument in which interpretations of motives and interpretations of materials simultaneously warrant one another, the Amerithrax Task Force provides a nearly impenetrable account of the 'true meaning' of Ivins' thoughts and actions. While the FBI maintains that investigators must frequently draw inferences from loose and circumstantial evidence, what is at issue in this case is much more complex. As the case of the Rajneesh shows, what counts as circumstantial evidence is the product the tacit judgment of scientific and criminal experts that often seems inexplicable. This problem may not be unique to bioterror, but when the balance between competing attitudes becomes out of proportion grotesque consequences arise. When one attitude comes to dominate an important sphere of public discourse, the attitude itself becomes invisible and synonymous with that sphere. In the cases I am concerned with here, bioterror talk becomes equivalent to paranoid talk. Bioterror talk need not be this way always. Further, as I hope to show, paranoia does not always make us safer and, in some cases, it may make us less safe.

1.1 PARANOIA AND SKEPTICISM AS DIALECTICAL ATTITUDES

> How can we account for our present situation unless we believe that men high in this government are concerting to deliver us to disaster?
>
> – Sen. Joseph McCarthy

Every case of bioterror requires the intersection of a scientific weapon and a political motivation. Similarly, within every case narrative we will find a struggle between two attitudes: the skeptical attitude of the forensic scientist and the paranoid attitude of the criminal investigator. In naming this the attitude "paranoid," I mean to point to a way of seeing and acting in the world closely

related to what Richard Hofstadter has called the "paranoid style."[23] Hofstadter argued that the political personality typical of the Goldwater Republicans should be understood as part of a long history of political paranoia that could be traced, thematically, back to eighteenth century anxieties about conspiracies involving the Illuminati and Freemasonry. Specifically, the paranoid believes that behind the events of history lie secret, conspiratorial actors working toward an apocalyptic end. In this way, the spokesperson of the paranoid style sees the world like the clinical paranoid, but whereas the clinical paranoid imagines that world is against *him* the spokesperson of the paranoid style sees the conspiracy as directed against his culture, nation, etc. Importantly, naming a piece of discourse as paranoid is not a judgment about the truth or falsity of its conclusion (or the truth or falsity about the existence of conspiracies), but only a description of "the way in which ideas are believed and advocated."[24] For this reason, the paranoid style is a natural one for the criminal investigator within the context of the war on terror – a war predicated on the notion of just such a conspiracy by Islamic fundamentalists, who wage a clandestine war against America and American culture. There are other ways of responding to incomplete evidence and so I contrast this paranoia with what I call the skeptical attitude – a way of responding to incompleteness and ambiguity that implores us to take our time, wait and see, and to test hypotheses until more certainty can be had. Both attitudes are concerned with risks, but differently so. Whereas the paranoid might worry what we risk by failing to act, the skeptic might worry whether we should act at all. Seen this way, each attitude has a useful purpose in a deliberation because each could be concerned with making sure we respond appropriately and

[23] Richard Hofstadter, *The Paranoid Style in Modern Politics and Other Essays* (Chicago: University of Chicago Press: 1979).
[24] *Ibid*., 5.

prudently. Deliberation works, in part, through the agonism of such attitudes. When one attitude is absent or suppressed, deliberation will suffer.

As I will show in the case of the Rajneeshee, Congressman Jim Weaver speaks as a paranoid when he says that there must be a "madman" behind the cluster of food poisonings in The Dalles. Echoing McCarthy (quoted above), Weaver claims that there is no other explanation of his current state of affairs other than a deep conspiracy against his community's way of life. In the eyes of local investigators, Weaver has no proof of this conspiracy other than his suspicions. In fact local epidemiologist have already ruled out a human cause for the outbreak. These epidemiologists act as a skeptical counter for Weaver's perspective. In the case of the Rajneeshee, the skeptic and the paranoid hold at issue whether or not a crime has been committed. In each bioterror case I consider, this tension exists between skeptical scientists and paranoid investigators in answering two key questions: (1) has a crime occurred and (2) if so, who is to blame? While the skeptical attitude dominated the Rajneeshee case in the 1980's, it is the paranoid attitude, I argue, that holds sway in the twenty-first century cases that I consider (the cases of Steve Kurtz and Bruce Ivins). Both cases show the skeptical attitude to have lost its teeth and been made subservient to the expertise of paranoid investigators. Within the context of bioterror, the skeptical attitude is at a distinct disadvantage. Because of the ambiguity and complexity of the technologies associated with biological warfare and the importance of motive in cases of terrorism, forensic conclusions are shown to be inadequate to solve bioterror cases (as the Rajneesh case proves, once re-imaged into the history of bioterror). Paranoia becomes necessary, even appropriate, in protecting the community from the terrorist.

These rubrics of skepticism and paranoia denote tendencies not only in speaking but also in acting, and so I call them not just rhetorical styles but attitudes. The paranoid attitude is alive

in Congressman Weaver's speech, but also in the numerous legal actions against Steve Kurtz and Bruce Ivins. That is, the paranoid attitude is visible in both material and speech acts. What I hope to show by calling attention to this tension is the way in which the dynamics of definitive discourse about bioterror tend to work in favor of the paranoid. The complexity, ambiguity, and perceived risks make quick action based on suspicion easily justified. The paranoid attitude taps into fears about biotechnology, public health risks, and terrorism with ease in a way that leads investigators to strange conclusions. In Chapters 3 and 4 I show how it justifies prosecuting an art professor and driving a mentally ill suspect to suicide. The criminal investigators in these cases need not be malicious or incompetent to reach such ends, merely caught up in the paranoid attitude that is, to some degree, appropriate to their job. Paranoia may be required to catch the guilty, but we need skepticism as well if we hope not to accuse the innocent. Both purposes are important, and each needs an attitude as advocate.

1.2 DEFINTION, ABDUCTION, AND DRAMA

In order to find the real artichoke, we divested it of its leaves.

-Ludwig Wittgenstein *Philosophical Investigations*[25]

Because of what I have said already about the term "bioterror," a reasonable critic might think that I am suggesting a kind of skepticism about the existence or threat of bioterror. Galamas, for instance, warns against the perspective that the bioterror threat is "overblown."[26] It is true that I am, within the context of this investigation, advocating for a more skeptical attitude about bioterror, however it is not the kind of skepticism that Galamas is concerned with. When

[25] Ludwig Wittgenstein. *Philosophical Investigations: German Text, with a Revised English Translation 50th Anniversary Commemorative Edition,* ed. G.E.M. Anscombe (Indianapolis: Hackett, 2001) §164.
[26] Galamas, "Profiling," 88.

Galamas equates knowledge of the "true meaning" with understanding that the threat is not overblown, he risks conflating some state of affairs in the world with a set of necessary judgments about how to talk about that state of affairs. It is reasonable to accuse someone of mischaracterizing a situation or not knowing enough about the world. However, definitions and descriptions are ways of talking about the world, and ways of talking are up for deliberation. By the lights of one definition of bioterror there may be no threat at all, whereas some other definition might show the threat to be profound. Understanding biothreats is more complicated than describing the world using Galamas' terminology. Threats, technologies, and political situations change - and have changed dramatically during the last four decades of biothreat talk. We should avoid understanding biothreats as a stable category if only because the motivations of terrorists and the technologies available to them are constantly changing. Further, who gets called a terrorist is a political matter and not reducible to scientific description. What the history of anxieties about bioterror shows is that scientists and biosecurity researchers are often not good judges of which technologies will become threats or which kinds of individuals should or will count as terrorists. As I show, especially in Chapter 3, those looking to make weapons often use materials which seem benign. In turn, those using seemingly benign materials are treated with intense suspicion. This is a natural connection, but, as I show in the case of Dr. Steve Kurtz, it can lead to absurd consequences. In sum, we must do more than simply educate people about how the world works using a pre-existing framework of description. We need to take a critical view of that descriptive framework and inspect the values and attitudes that have been poured into it. There is certainly room for a critique of a given risk analysis. Indeed that is the specific purview of the security expert. However, it is wrong to treat the output of a risk analysis as a final description which can only be meaningfully described as true or false. Presumably a case

definition of what counts as a biothreat needs to be practical for the purposes of risk analysis, but that does not describe the extent of its use. Investigators and citizens need to be able to meaningfully apply definitions to situations in the world, and we should be be worried when a definition seems either too promiscuous (paranoid) or not promiscuous enough (skeptical). This investigation will seek to both explain some of the conceptual flexibility within "bioterror" and to describe several critical episodes in which the limits of "bioterror" are tested.[27]

Instead of pursuing an investigation of definition that focuses on meaning, truth, or accuracy, I say, with Schiappa, that definition is a pragmatic concern and that an investigation into definitive discourse is an investigation interested in both the circumstances in which definitions emerge and the situations in which definitions are used.[28] Thus we should seek definitions that fit into the value-laden form suggested by John Searle and embraced by Schiappa: "X counts as Y in context Z."[29] Such a view of definition explicitly requires that we deliberate and consider how definition Y is meant to function in context Z toward some particular end. When definitions are crafted and deployed without a focus on consequence and value, a speaker can advocate for a particular set of values without explicitly calling attention to them.[30] So, with respect to some given definition, we might be concerned with both the consequences of a definition as well as its source. Schiappa shows convincingly that President George H. W. Bush attempted to redefine the term "wetlands" in order to satisfy his conflicting

[27] It should worry us, I think, that these limit cases also happen to be the major, definitive cases of biological terrorism in the twentieth and twenty-first century. That is to say limit cases are the normal cases so far. Whether this is necessary or simply the result of an absence of a good definition is an interesting question, but one that this investigation can only speculate about.

[28] Schiappa, *Defining*, 5-6.

[29] *Ibid*., 50-60, drawing extensively from John R. Searle, *The Construction of Social Reality*, (New York: Simon and Schuster, 1995).

[30] *Ibid*., 130-135.

political obligations.[31] In this way, Bush attempted to remain superficially coherent by standing with his commitment to defend the wetlands while simultaneously redefining what might count as a wetland so that 'defending the wetlands' entailed a smaller political cost. Definitions, then, are things of great power, especially in the special case of the President whose speech "defines political reality."[32] Just as definition can empower, it can disempower. Schiappa shows this too in his analysis of legal debates about whether or not a husband could, by definition, rape his wife.[33] Definitions do not just set boundaries around objects and events, they serve interests, enable courses of action, and embody specific perspectives. As I suggest above, in this way definitions can embody attitudes because definitions are at first crafted from some point of view and with some purpose in mind. If either of those, the purpose or the point of view that has built up a definition, is unclear or hidden, then anyone who uses that definition runs the risk of seeing the world through an unconsidered ideology. They risk rearticulating an act of power without reflection.

Because definitions serve interests, we should be concerned with the relationship between those who set definitions and those who are authorized to use them. There is good reason to think that the legislator of some definition may inadvertently (or purposefully) write his or her perspective into a particular term such that using the term tends to re-articulate that particular worldview. As Cohn found with defense intellectuals, it is possible to pour assumptions into a technical way of speaking such that it always works in the service of some particular set of goals.[34] Cohn observed that mastering these technical vocabularies was quite satisfying and it

[31] *Ibid*., 69-88.
[32] Zarefsky, David, "Presidential Rhetoric and the Power of Definition," *Presidential Studies Quarterly* 34, no. 3 (2004): 611.
[33] Schiappa, *Defining*, 49-69.
[34] Cohn, "Sex."

was often difficult to notice which possibilities a vocabulary tended to ignore. Thus, the creator of the definitions can, knowingly or unknowingly, narrow our worldviews. In Cohn's case, the defense intellectuals created a technical language that authorized their own expertise and made necessary a kind of missile policy that ruled out the possibility of disarmament and made irrelevant the question of human suffering. As I argue in Chapter 2, when Nixon redefines the political reality around biological weapons, he makes it both illegal and necessary for the US to produce biological weapons. Thus, ironically, the policy that he claims makes the nation safer from biothreats actually, by design, generates them.

Definitions serve interests because in order for phenomena to be spoken of, phenomena need names. In contrast to the rarer and often technical moments in which definitions are laid out, it is far more common that situations are provided explicit and implicit names through informal arguments and narratives. For example, as offered by Schiappa, definition can operate through an argumentative form similar to abduction. As explained by Charles Sanders Peirce, the abductive inference or argument takes the following form:

> The surprising fact, C, is observed.
> But if A were true, C would be a matter of course.
> Hence, there is reason to suspect that A is true.[35]

As I will show in Chapter 2 with the "accidents" near biological research facilities and in the Chapter 3 and 4 with suspected bioterrorists, this form of hypothesis generation plays an important role in the naming of events. Applied to these sorts of questions, the form would be more like:

> The surprising event, C (anthrax laden-letters), is observed.
> But if C (the letters) were an A (a bioterror attack), then it would be a matter of course.
> Hence, there is reason to suspect that C is an A.

[35] Charles Sanders Peirce, *Collected Papers of Charles Sanders Peirce*, ed. Charles Hartshorne and Paul Weiss (Cambridge: Harvard University Press, 1932) 5.189.

Formalized in this way, definitive discourse in the form of abduction are obviously problematic. How are we to know that there is not some category, "B," which equally or better accounts for the surprising matter of "C"? What is the force of having "reason to suspect" one name over another? Why should we take "C" as surprising in the first place? What about it places it outside the normal course of experience? In the case of long-term scientific investigation, where a skeptical attitude can run free, a proposed hypothesis in the form of an abductive inference could be tested and shorn up, dealt with in some more rigorous way. Which hypotheses are proposed, of course, is a problem of imagination. It is good to be imaginative, but it is also good to have time to see which imaginative hypothesis pays off. The specific cases at issue in this investigation are not purely scientific phenomena, but social phenomena – events confronted by humans or names of particular human situations. There is no time to imagine or test imaginative products. The public demands that events be named, and the Press is happy to name them with or without the help of scientists and criminal investigators.

The case narratives considered in Chapter 3 all take this form. Even the skeptical epidemiologists who are attempting to determine the causal origin of the food poisoning outbreak in Oregon must propose some series of hypotheses and point to the one which seems most reasonable. In their case, the ruling out of some hypotheses seems, in their view, to give weight to other hypotheses. Yet, as is shown in that Chapter, the limit of the reasonable hypothesis is the ability of the hypothesizer to generate the best list of hypotheses and the expertise of the hypothesizer will limit the ways in which he or she will attempt to explain surprising things in the world. This is a problem even within the context of scientific investigation, where critics often worry over the lack of diversity among both hypotheses and hypothesis generators. Most of the sources that I examine are, however, not engaged in explicit

definitive acts of the form "X is a Y" or even an apparently rigorous combination of hypothesis generation and elimination. Thus, the problem of imagination is even worse than it is within the context of science wherein the accepted modes of explanation are constrained. In public discourse we should not only want a range of explanations from within an expert point of view (i.e. a range of scientific explanations), but actually a range of explanatory points of view (i.e. scientific and political and economic, etc). When Nixon rearticulates biological weapons policy, he does so implicitly by offering a description of the state of affairs in US defense policy that employs specific terms and, in doing so, deploys one specific political way of seeing. When journalists in the 1960's explain the deaths of hundreds of sheep in Utah, the 'reason for suspicion' and suspicion itself are quite difficult to resolve. A short narrative of such a situation may provide a definitive account by leaving out other hypotheses and making bold, mere assertions.

Because we need accounts of the world in order to operate in it narratives should be understood, following Kenneth Burke, as "equipment for living."[36] In telling stories, Burke suggests, the teller, "tries to fight on his own terms."[37] Narratives are "strategies for dealing with situations" or, said another way, "attitudes."[38] Importantly, our attitudes persuade us about how to respond because they drive our definitions and definitions provide solutions. Thus, persuading others to accept an attitude becomes hugely consequential. It would be simple to say, for example, that Steve Kurtz or Bruce Ivins were railroaded by the Justice Department through shoddy arguments. This gratifies and flatters the political critic, but it does no interesting work

[36] Kenneth Burke, *The Philosophy of Literary Form* (Oakland: University of California Press, 1973): 293-304.
[37] *Ibid.*
[38] *Ibid.*; Here Burke is speaking specifically of proverbs and pieces of literature, but it is clear from his later work (especially *A Grammar of Motives*), that this view extends over any account of the world (including the scientific and philosophical), but especially accounts of human action.

because it fails to inoculate us to similar arguments in the future. Thus, the critic or skeptic should respond to problematic definitions with care. We should try to discover "what kind of 'medicine'" the definer is providing. What surprising fact are we confronting and how should we confront it?[39] Only with such an account in hand can we hope to, "forestall the concocting of similar medicine" in related cases.[40] This is, then, what is required of the critic when it comes to definition and is how I understand the operation and purpose of this critique in narratives and definitions about bioterror. In my view, there are serious negative consequences that flow directly from implicit and explicit definitions of bioterror, but demonstrating the consequences and their origins will require a sustained consideration of many narratives concerning bioterror directly, but also historical narratives which have built up the contemporary meaning of the term. Within these historical narratives we will find the struggle between skepticism and paranoia, and ultimately the worrisome dominance of paranoia.

1.3 DEFINITIONS AT WORK: BIORHETORICS

In her work on the rhetorical dynamics of discourse on germs and security, Keränen understands talk about bioterror risk to be an instance of what Lyne has called bio-rhetoric and defines the critical response to such discourse as biocriticism: "a sustained and rigorous analysis of the artifacts, texts, discursive formations, visual representations, and material practices positioned at the nexus of disease and culture."[41] In her view, this thread is pre-existent but underdeveloped in the field of rhetorical studies. Since I understand this investigation as part of this thread, it would help both to describe briefly from where this nascent thread originates and how this investigation extends it.

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[39] Burke, *The Philosophy of Literary Form*, 191-233.
[40] *Ibid.*
[41] Lisa Keränen, "Review Essay: Addressing the Epidemic of Epidemics: Germs, Security, and a Call for Biocriticism," *Quarterly Journal of Speech* 97, no. 2 (2011): 225.

While the whole of communication studies can be properly understood as being concerned with discourse, the portions of that field concerned with discourse about science can be bifurcated in the same way that I have already bifurcated investigations into bioterror. On the one hand, there are investigations which use pre-existent categories. On the other, there are those which purport to investigate the construction of a given category. In communication studies, the former usually falls under the related rubrics of health, science, and risk communication. Indeed, much of the current communication scholarship on bioterrorism has been generated by researchers in these growing fields. One such exemplary case related to the 2001 anthrax mailings are the works which, collectively, made up the *Journal of Heath Communication's* 2003 special supplement devoted to the subject.[42] In that volume, researchers grapple with the terrible difficulty that emerges when journalists and public health officials work to circulate information within a crisis. In the wake of the anthrax mailings, it became clear that the relationship between the supply of and demand for clear information about what was known by scientific investigators were not well matched. When journalists filtered and explained the information provided by health officials, what those officials hoped to communicate was often left out and what journalists hoped to learn from them was rarely given. In short, the work practices of the Centers for Disease Control (CDC) came occasionally into conflict with the work practices of journalists. After the immediate public health crisis ended, researchers wanted to know how well relevant scientific messages travelled from the CDC to the public. Which details did the CDC include in press releases? Which details were highlighted by journalists? Which messages and media did citizens receive and trust? In what ways did the system fail? Generally researchers discovered that while CDC experts gave accurate information to journalists, the CDC

[42] *Journal of Health Communication*, 8, no. S1 (2003).

was not structurally prepared to deliver messages that similarly emphasized the kind of information that would have helped the public at the volume that situation seemed to demand.[43] Further, when journalists reported information passed on by the CDC, there were serious discrepancies between what the CDC and the journalists considered to be newsworthy detail. Since managing public health crises depends on the form and content of messages to the public, these kinds of discrepancies virtually ensure that any crisis communication will fail. Even worse, in this case, there seems not to have been a plan at all. For example in one study sample half of the CDC releases spelled out who had been exposed to the anthrax, less than 10% of journalistic accounts did so.[44] Similar discrepancies were found with respect to the mention of relevant exposure and prevention variables. Interestingly enough, another study found that these problems do not seem to have damaged how trustworthy public health sources seem to citizens.[45] These studies are exemplars of the socio-scientific approach to problem solving and they integrate approaches from social psychology and anthropology in order to, generally, explain the effect of messages on beliefs.[46]

These perspectives are not integrated with, but can be understood as operating side-by-side with sociologists and anthropologists (especially medical anthropologists) who are interested in the power relationships between the various experts who disseminate information as

[43] Susan J. Robinson, and Wendy C. Newstetter, "Uncertain Science and Certain Deadlines: CDC Responses to the Media During the Anthrax Attacks of 2001," *Journal of Health Communication* 8, no. S1 (2003): 17-34.

[44] Felicia Mebane, Sarah Temin, and Claudia F. Parvanta, "Communicating Anthrax in 2001: A Comparison of CDC Information and Print Media Accounts," *Journal of Health Communication* 8, no. S1 (2003): 50-82.

[45] William E. Pollard, "Public Perceptions of Information Sources Concerning Bioterrorism Before and After Anthrax Attacks: An Analysis of National Survey Data," *Journal of Health Communication* 8, no. S1 (2003): 93-103.

[46] These articles are helpful examples with respect to the specific issue in this investigation, but a more thorough survey of the field can be found in Matthew W. Seeger, Timothy L. Sellnow, and Robert R. Ulmer, *Crisis Communication and the Public Health* (New York: Hampton, 2008), and William James Willis and Albert Adelowo Okunade, *Reporting on Risks: The Practice and Ethics of Health and Safety Communication* (New York: Praeger, 1997). The former provides a summary of some best practice recommendations in public health communication based on empirical research whereas the latter considers the relevant practical and ethical problems faced by journalists who report on complex, risk issues.

well as the relationship between expert and lay groups. For example, Charles Briggs, a medical anthropologist, has documented the ways in which journalists and scientists often have clashing views about their own relationships with one another.[47] His work suggests journalists may often identify themselves as part of the public health apparatus even as the public health officials see journalists as some combination of both an obstacle and a tool. More importantly, Briggs shows how medical discourse is capable of creating categories of 'bad' citizens who represent public health problems. Thus, scientific and medical accounts do work to redefine populations and can confirm/disconfirm people's expertise about themselves and their world. Brian Wynne, a Sociologist, has shown the ways in which scientists demote and even ignore the expertise of those who are outside of their own institutional boundaries.[48] As representers of the world, scientists face serious limits in their ability to successfully represent their expertise and convince the non-expert.[49] For those working near the intersection of medical anthropology and the sociology of scientific knowledge, scientific representations of the world are political because they authorize a definition of a state of affairs which are often meant to solve problems, but may not only demote the knowledge and experience of the non-scientist and but may even do damage to the bodies of the non-scientist.[50]

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[47] Charles L. Briggs, "Why Nation-States and Journalists Can't Teach People to Be Healthy: Power and Pragmatic Miscalculation in Public Discourses on Health," *Medical Anthropology Quarterly* 17, no. 3 (2003): 287-321.

[48] Brian Wynne, "Misunderstood Misunderstanding: Social Identities and Public Uptake of Science," *Public Understanding of Science* 1, no. 3 (1992): 281-304. For similar work about the public understanding of science, see Wynne alongside others in Alan Irwin and Brian Wynne, eds. *Misunderstanding Science?: The Public Reconstruction of Science and Technology* (Cambridge UK: Cambridge University Press, 1996).

[49] For a profound example of this in relation to communicating about radiation, see Olga Kuchinskaya, "Articulating the Signs of Danger: Lay Experiences of Post-Chernobyl Radiation Risks and Effects," *Public Understanding of Science* 20, no. 3 (2011): 405-421.

[50] For this latter case, see especially Susan M. Reverby, "'Normal Exposure' and Inoculation Syphilis: A PHS 'Tuskegee' Doctor in Guatemala, 1946-1948," *Journal of Policy History* 23, no. 1 (2011): 6-28, and Susan M. Reverby, "Ethical Failures and History Lessons: the US Public Health Service Research Studies in Tuskegee and Guatemala," *Public Health Review* 34 (2012): 1-18.

This attention to scientific representations in both discourse and images is the space of intersection for these socio-scientific approaches and rhetorical studies. The interrelated fields of the Rhetoric of Science, Health, and Medicine share both the attention to messages found in Science Communication and the critical attitude found in Anthropological and Sociological studies of related phenomena. Under a rubric like the Rhetoric of Science, rhetoric is understood to be not only the argumentative practice peculiar to science, but also the way in which scientific arguments constitute the scientific disciplines while also configuring states of affairs in the world.[51] In short, the rhetorical critic will be at least interested in the ways in which a scientist makes arguments, allies and associates herself with other scientists through discourse, and configures the world (and the people in it) by way of that discourse. Science, like other domains of inquiry, does not always understand itself to be presenting arguments at all – that is, the scientist may say that scientific arguments are nothing other than beliefs generated from sufficient evidence about the world. Yet, in scientific – especially medical – descriptions, the critic will still find uncertainty, metaphor,[52] productive ambiguity,[53] appeals to scientific expertise,[54] and even appeals to the imaginative.[55]

That scientific and medical discourse contains persuasive elements is not a problem, but merely a matter of fact from this critical perspective. Problems do emerge, however, when

[51] For a longer elaboration and history, see John Lyne, "Rhetorics of inquiry," *Quarterly Journal of Speech* 71 (1985): 65-73.

[52] Scott L. Montgomery, *The Scientific Voice* (New York: Guilford Press, 1996).

[53] Leah Ceccarelli, *Shaping Science with Rhetoric: The Cases of Dobzhansky, Schrodinger, and Wilson* (Chicago: University of Chicago Press, 2001).

[54] John Lyne and Henry F. Howe, "The rhetoric of expertise: EO Wilson and sociobiology" *Quarterly Journal of Speech* 76, no. 2 (1990): 134-151; John Lyne and Henry F. Howe, "'Punctuated equilibria': rhetorical dynamics of a scientific controversy" *Quarterly Journal of Speech* 72, no. 2 (1986): 132-147.

[55] Nathan Crick, "Conquering Our Imagination: Thought Experiments and Enthymemes in Scientific Argument," *Philosophy and Rhetoric* 37, no. 1 (2004): 21-41. There is good reason to think that these phenomena have a rich history that traces back to the earliest recorded scientific arguments. See especially John Poulakos and Nathan Crick "There is Beauty Here, Too: Aristotle's Rhetoric for Science" *Philosophy and Rhetoric* 45, no. 3 (2013): 295-311.

scientific experts do not consider, for instance, the ways in which their discourse shapes the world, invades discourse on other subjects, demotes the experience of others, and does conceptual and physical damage to others.[56] A helpful, paradigmatic example of this critical perspective would be Judy Segal's landmark *Health and the Rhetoric of Medicine* and the work it helped to inspire in Joan Leach and Deborah Dysart-Gale's edited volume *Rhetorical Questions of Health and Medicine*.[57] In both volumes, the authors seek to interrogate the relationships that emerge in clinical settings, between medical practitioners and patients. That is, the relationships between medical experts and the bodies that they are charged with describing, diagnosing, and mending. Much is both physically and conceptually at stake in these settings, not the least of which is a struggle for control over the patient's body. Thus, these authors and others constitute the response by rhetorical scholars to the call for biocriticism elaborated by Lyne and Keränen. The hallmark of such an approach, in contrast to the approach generally pursued by science and risk communication researchers, is the asking of what Leach and Dysart-Gale call "prior questions."[58] That is, inquiry in the ways in which terms and perspectives get built up prior to being deployed. These inquiries might help us understand what kinds of terms

[56] John Lyne, "Contours of Intervention: How Rhetoric Matters to Biomedicine," *Journal of Medical Humanities* 22:1 (2001): 3-13; Gordon R. Mitchell and Kelly Happe, "Defining the subject of consent in DNA research," *Journal of Medical Humanities* 22, no. 1 (2001): 41-53.

[57] Judy Z. Segal, *Health and the Rhetoric of Medicine* (Carbondale: SIU Press, 2008); Joan Leach and Deborah Dysart-Gale, *Rhetorical Questions of Health and Medicine* (Lanham: Lexington Books, 2011). See also Judy Z. Segal, "Interdisciplinarity and Bibliography in Rhetoric of Health and Medicine," *Technical Communications Quarterly* 14, no. 3 (2005): 311-318; Colleen Derkatch and Judy Z. Segal, "Realms of Rhetoric in Health and Medicine," *University of Toronto Medical Journal* 83 (2005); and Judy Z. Segal, "Public Discourse and Public Policy: Some Ways That Metaphor Constrains Health (Care)," *Journal of Medical Humanities* 18, no. 4 (1997). Finally, Lisa Keränen's contribution to this thread of inquiry is best seen in Lisa Keränen, "''Cause Someday We All Die': Rhetoric, Agency, and the Case of the "Patient" Preferences Worksheet," *Quarterly Journal of Speech* 93:2 (2007): 179-210. Keränen and Segal are at the head of a call for more work in this vein. Their view of the field and its possibilities can be found in Blake Scott, Judy Z. Segal, and Lisa Keränen, "The Rhetorics of Health and Medicine: Inventional Possibilities for Scholarship and Engaged Practice," *Poroi* 9, no. 1 (2013), accessed November 20, 2014, http://ir.uiowa.edu/poroi/vol9/iss1/17/.

[58] Joan Leach and Deborah Dysart-Gale "Why Ask Rhetorical Questions?" in *Rhetorical Questions of Health and Medicine* eds. Joan Leach and Deborah Dysart-Gale (Lanham: Lexington Books, 2011): 1-8.

and messages we would want to send (and how we can send them) in the first place, completely separate from the matter of which messages have been effectively transmitted.

In this vein, I propose a rhetorical, biocritical investigation into "bioterror," "bioterrorism," and "bioterrorists." Such an investigation could take many forms – Keränen has already proposed an examination of "changing visions of viral apocalypse in biodefense discourse."[59] What I propose is specifically an investigation of the relationship between uses of Cold War definitions of bioweapon defense research and post-Cold War uses of definitions of bioterrorism. To do this, I examine narrative accounts that implicitly or explicitly describe the origin of bioweapon threats. As I will demonstrate at length, the press made much of a prolonged political debate about the danger and/or necessity of US biodefense facilities, and in 1969 Nixon intervened to end that debate both politically and rhetorically. In doing so, Nixon immediately limited the possibilities for biothreat origins and in the much longer term dramatically altered the possibilities for human biothreats within the context of terrorism. Through a similar, definitive process, Török and his colleagues circumscribed the ways in which those categories can be recognized by those who might take on the skeptical attitude. That is, they quite accidentally make necessary and important those individuals who are most likely to embody the paranoid attitude: criminal psychologists and investigators. I do not assume that Nixon and Török meant to affect the way that we talk about terrorists, but their arguments show how consequential definitive discourse can be, especially when it leverages political or scientific expertise to redefine human beings and their practices.

[59] Keränen "Addressing the Epidemic," note 15.

1.4 DEFINITIONS AT WORK: COMMUNICATING (BIO)TERROR

Any study about the definitive discourse of bioterrorism must also confront the definitive discourse about terrorism. As I explain below, the term "bioterror" seems to be the conjunction of two terms: biological and terrorism. Thus, we might be tempted to think that what bioterrorism really amounts to is a qualified or special case of terrorism. By this reasoning, we could first get right about terrorism and simply narrow our focus to terrorist acts that involve specific types of (biological) weapons. This is, in my view, not the case because, as I explained in prior sections terrorism and bioterrorism have already shaped one another. However, if we assumed that we could begin with a stable, distinct, and independently generated definition of terrorism, we would still have to manage a difficult problem. Joseph Tuman, in *Communicating Terror*, describes the state of contemporary definitions of terror as, in a word, "chaos."[60] He provides both a detailed history of the term and lays out no less than seven different ways to understand definitions on the: terrorist-like acts prior to the term, the use and development of the term in revolutionary France, modern academic definitions, modern state-authorized definitions, internationally accepted definitions, and definitions developed by terrorists. Tuman further considers how some uses of the term constitute merely "labels," or what I refer to as implicit or narrative acts of definition. In short, the practical problem of "X counts as Y in context Z" is that there may be not only many contexts and also multiple definitions in each context.

The largest body of clear definitions of terrorism come, perhaps obviously, from the State – that is, from authorized political institutions. This includes both legal definitions and definitions by law enforcement agencies. For example, Title 22 of the US Code defines terrorism as, "premeditated, politically motivated violence against non-combatant targets by sub-

[60] Tuman, *Communicating Terror*, 2.

national groups or clandestine agents."[61] Yet, Title 18 offers two slightly different definitions – bifurcating the term into domestic and international terrorism. Title 18 defines "domestic terrorism" as activities that:

> (A) involve acts dangerous to human life that are a violation of the criminal laws of the United States or of any State;
> (B) appear to be intended—
> (i) to intimidate or coerce a civilian population;
> (ii) to influence the policy of a government by intimidation or coercion; or
> (iii) to affect the conduct of a government by mass destruction, assassination, or kidnapping; and
> (C) occur primarily within the territorial jurisdiction of the United States.[62]

Titles 18 and 22 have different purposes (Title 18 offers definitions relevant to criminal law, while Title 22 defines procedures relevant to foreign relations), thus it seems reasonable for them to define the term differently. Title 18, for example, trades "political motivation" for "apparent intention," and further explodes that category into its subtypes. The language of a foreign war is traded for the language of criminal psychology. To add to the ambiguity, Title 18 Chapter 113b (of which the above definition is part), also contains a section which defines "Use of weapons of mass destruction," as including the use of "any weapon involving a biological agent, toxin, or vector."[63] Thus, an interesting puzzle emerges in the law. What is the relationship between this definitional criteria and the condition above which references apparent intention? Are materials and motives required, or is one sufficient to define an activity as terrorism? This difficulty contributes to a 'motivational gap' in definitions of terror and will require further attention since materials and motives fall under the purview of different experts (with different attitudes). As a preliminary, however, it is helpful to see how these legal definitions are already muddied further by definitions used in other U.S government forums:

[61] U.S. Code 22 (2004), §2656f(d).
[62] U.S. Code 18 (2001), §2331.5.
[63] U.S. Code 18 (2008), §2332b.

> The Department of Defense – "the calculated use of violence or the threat of violence against individuals or property, to inculcate fear, intended to coerce or to intimidate government or societies in the pursuit of goals that are political, ideological, or religious." The FBI - "the unlawful use of force or violence against persons or property to intimidate or coerce a Government, the civilian population, or any segment thereof, in furtherance of political or social objectives."[64]

These definitions also focus attention on motivation as a key term and offer different but overlapping types of motivation as the key factor in the act of terror. It is for this reason, in part, that Tuman suggests that we are very much in need of a communicative definition of terrorism, a definition that sees acts of terror as essentially rhetorical acts directed against a population so as to influence their attitudes and actions. Thus, Tuman's work is helpful in filling out what terrorism is by inquiring after what terrorism does or might be intended to do. While legal highlight materials, official definitions often highlight motives and scholars like Tuman and others are interested in taking that focus further. Tuman cites, for example, Martha Crenshaw's definition which highlights further the motivational element. She writes that terrorism is, "a conspiratorial style of violence calculated to alter the attitudes and behavior of multitude audiences. It targets the few in a way that claims the attention of the many. Terrorism is not mass or collective violence but rather the direct activity of small groups."[65]

The motivational element is, thus, a key element in definitions of terrorism – at least when those definitions are offered by the state or political scientists and historians interested in describing the current state of political affairs. However, critics of such a view maintain that this is also a symptom of the fact that the state is in the position to define terrorism, and in doing so

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[64] Definitions cited by Tuman, *Communicating Terror*, 6 and Carus "Bioterrorism and Biocrimes," 3. For original sources see *DOD Dictionary of Military and Associated Terms* and www.fbi.gov, respectively.

[65] Tuman, *Communicating Terror*, 9, citing Martha Crenshaw ed., *Terrorism in Context* (University Park, PA: Penn State University Press, 1995). Tuman also here cites a related definition by Walter Laquer who focuses attention on both intentions and publicity. See Walter Laquer, *The Age of Terrorism* (Chicago: Little Brown and Co, 1987). This publicity-centric view of terrorism is also the impetus for Richard Leeman's account of counter-terrorism as a necessarily democratic and rhetorical program. See Richard W. Leeman, *The Rhetoric of Terrorism and Counterterrorism* (New York: Greenwood Press, 1991).

the State engages in a clear reshaping of the world so as to make the State exempt from blame. Annamarie Olivero argues that, "[b]y claiming to be defining a type of violence, i.e., one that threatened the site of legitimate violence (the state), it is clear that this term is reserved for the art of statecraft."[66] Thus, when Tuman calls terrorism rhetorical he also embraces the fact that defining terrorism is rhetorical as well. Indeed, both are rhetorical and both are political – this is, as explained above, part of what it is to define. Sociologist Lisa Stampnizky has gone so far as to say that terrorism was wholly "invented" by security experts.[67] This must be, of course, partially true by necessity. The relevant worry is that, perhaps, this invention has been done in problematic ways that also hide the problems from the non-expert. In at least that way, this investigation is sympathetic to Stampnizky's.

Because of the complexity with which talk of and images about terror have spread across public and expert conversations, rhetorical and communication scholars are already deeply engaged with the problems of terrorism. A relevant sample of the field is provided in *Terrorism: Communication and Rhetorical Perspectives*, a volume edited by the interdisciplinary group of Dan O'Hair, Richard Heath (authors of numerous, landmark volumes on Crisis and Risk Communication), Kevin Ayotte (a rhetorical critic of both classical and contemporary political rhetoric), and Gerald Ledlow (a Healthcare Management researcher).[68] This wide ranging volume includes almost all of the above mentioned methodologies – media criticism, post-colonial critique, crisis management, political philosophy, and public argument to name merely a

[66] Tuman, *Communicating Terror,* 9, citing Annamarie Oliviero, *The State of Terror* (New York: SUNY Press, 1998).

[67] See Lisa Stampnitzky, *Disciplining Terror: How Experts Invented 'Terrorism'* (Cambridge UK: Cambridge University Press, 2013). Tuman does not confront Stampnitzky's work, but he does caution us against using overstating the case of social construction. Tuman sympathizes with the views expressed by Hacking that the notion of 'Social Construction' has the potential to become vacuous when not carefully attended to. See Ian Hacking, *The social construction of what?* (Cambridge: Harvard University Press, 1999).

[68] Dan O'Hair, Robert Heath, Kevin Ayotte and Gerald Ledlow eds., *Terrorism: Communication and Rhetorical Perspectives* (New York: Hampton Press, 2008).

few. In sum, the definition and management of images and events is an overflowing field of interdisciplinary scholarship already intersected with the interested and tools of rhetorical critics.[69] What is, however, lacking in all of these volumes is a particular concern with bioterrorism as a distinct object of study (or at least an object worthy of distinct study). Keränen's call for a biocritical turn toward biodefense is, then, a timely call that would bridge many conversations already independently underway.

Because of the expansiveness of current research into terrorism and the relative dearth of critical scholarship into bioterrorism, it is difficult to frame the matter critically (because it lacks a frame) while constraining the inquiry (to keep it manageable). Thus, what I propose in this investigation is necessarily modest, but directed toward a very specific gap in the literature – the gap both between definitions of terror and bioterror and a related gap that I claim exists within definitions of both. As I suggest above, these gaps are 'motivational' in that they rely upon the ascription of motive and/or a definitive accounting of the apparent intention behind the attack. These definitions carry a necessary element which is, in similar language to Galamas', behind or below the material state of affairs of some attack. Talking about a bioterror event may require a story about motive from, as I show in later chapters, an expert on the matter of motive. On the other hand it would seem to be the case that the mere use of a biological weapon constitutes not just an attack but a bioterror attack(based on the weapons of mass destruction statute), even if the attack were carried out in a way totally inconsistent with the motivational definitions of terrorism. As I show starting in Chapter 2, this stems from an apparent conflict between reasonable action and the use of biological weapons. That is, according to arguments made by

[69] The sample offered here is, then, necessarily a sample. One final, noteworthy volume which should interest the reader is the aesthetic criticism in Marc Redfield's under-cited volume on the political sublimity of both terror and the declaration of war on terror. See Marc Redfield, *The Rhetoric of Terror: Reflections on 9/11* (New York: Fordham Univ, 2009).

the United Nations and President Nixon in the 1960's, a rational person would never use or even possess a biological weapon. Therefore, anyone who has done such a thing is beyond the normal field of war and politics and the rules that govern both. They are madmen. Finally, as I show in Chapter 4, it becomes possible to show that an unreasonable person should be a person of interest and suspicion. What counts as a weapon is made muddy after Nixon's renunciation of biological weapons, and I hope to show how, as a consequence, defining events as bioterror attacks becomes fraught. As I will show, a paradox emerges – the suspected bioterrorist is called upon by law enforcement to account for his actions, but accounting for his actions is exactly what the bioterrorist cannot do, by definition.

1.5 DEFINITIONS AT WORK: LOCATING RISKS

One might think that such an investigation into the development of a definition amounts to nothing other than an investigation motivated by curiosity and abstraction. Indeed, a security researcher like Galamas might think that asking of these sorts of prior questions is academic, but impractical. Bioterror presents an active and real risk in society. This may be so, but if we can insist on the pragmatics of definition, then it must be admitted that a claim about the existence of bioterror risk prior to an open and pragmatic considerations of our terms may beg the question. This is not just because definitions of bioterror make the bioterror risk an ambiguous concept, but also because the proliferation of risks in contemporary society is a problem already. Robert Danisch has helpfully drawn important links between rhetorical studies and the growing field of risk analysis – specifically he has argued that the problem of risk is one that rhetoric and rhetorical studies are well positioned to address.[70] The problem of risk, which Dansich

[70] Robert Danisch, "Political Rhetoric in a World Risk Society," *Rhetoric Society Quarterly* 40, no.2 (2010): 172-192.

understands in the specific terms of what Ulrich Beck has called the "world risk society," is nothing other than the necessary upshot of "techno-scientific rationality."[71] That is:

> The tremendous ''success'' of scientific research and technological development now acts to produce uncertainty, fear, and danger. As such, science and technology stand at the center of contemporary political rhetoric in a radically different way.[72]

As Danisch explains it, advances in statistics in the 19th and 20th century which made threats and hazards quantifiable and predictable have stalled in the face of new types of catastrophic, contemporary events. For example, in Becks words, "the injured of Chernobyl are today, years after the event, not yet born."[73] These events, like the catastrophe at Chernobyl, are uniquely non-local in both geographic and chronologic terms. Further, these events are manufactured. To use another of Danisch's examples – the problem of life-threatening super-resistant bacteria is a direct result of medical advances such as antibiotics.[74] Thus, the march of technological progress is also a march toward (possible) disaster, with technoscience simultaneously solving problems and creating new risks. The one problem that technoscientific rationality cannot solve on its own, however, is how to respond to the problem of risk itself. In Beck's view, "there are no expert solutions in risk discourses, because experts can only supply factual information and are never able to assess which solutions are culturally acceptable."[75] This requires judgment, deliberation, and a critical attitude.

Too often, however, is the necessity for judgment obscured by experts in security studies – experts who claim to wield authority over the thing that Beck claims expertise cannot adjudicate. Because experts are not able to (or, at least, should not be allowed to) decide for us

[71] Danisch, "Political Rhetoric," 173 citing Ulrich Beck, *Risk society: Towards a New Modernity* (New York, Sage, 1992).
[72] *Ibid.*,173.
[73] Beck quoted in Danisch, "Political Rhetoric," 179
[74] *Ibid.*,179.
[75] Beck quoted in Danisch, "Political Rhetoric," 182

on matters of security we must continually engage in productive critique of the products of security studies. Keränen's criticism of government-run bioterror simulations provides a useful example of how and why such work must be done. Her work shows that, by dramatically making visible the risk of a bioterror attack, the Department of Homeland Security (DHS) is able to justify military responses to public health crises. Paradoxically, the risk-filled world simultaneously requires caution with pre-emptive, militaristic action.[76] Nothing in the science of risk can necessitate such solutions, but by asserting that the non-expert cannot understand the problem and then dramatically making visible a catastrophe, security experts can make a persuasive case for a solution that fits their own worldview. This process of simulation to make risks visible is part of what Andrew Lakoff has described as the shift from prevention to preparedness in the increasingly related fields of security and public health.[77] Catastrophes are not only imagined, but made into elaborate productions in the form of table-top games and fully enacted (as in, with actors) simulations. For all of these scholars – Beck, Danisch, Keränen, and Lakoff – the problem of risk is a political problem and the public should have a share of the power in deliberating about how we should respond. For Dansich and Keränen the critical/rhetorical perspective is an important part of the solution. By making the persuasive elements in risk discourse visible, the expert's claim that the non-expert cannot understand is

[76] For an explanation of this paradox and how it problematizes Beck's generalizations about the world risk society, see Claudia Aradau and Rens Van Munster, "Governing Terrorism Through Risk: Taking Precautions, (Un) Knowing the Future," *European Journal of International Relations* 13, no. 1 (2007): 89-115. Aradau and Van Munster use Michel Foucault's notion of governmentality to helpfully demonstrate how risk can be understood as a technology for governing and therefore political in ways that Beck overlooks in his early work.

[77] Andrew Lakoff, "The Generic Biothreat, or, How We Became Unprepared," *Cultural Anthropology* 23, no. 3 (2008): 399-428. Much more is said about Lakoff's generic biothreat and how bioterrorism is subsumed into it in Chapter 1.

undermined. Problems of risk require a combination of judgment and scientific knowledge, but the site of judgment must be visible in order for substantive deliberation to occur.[78]

In order for security experts to close the loop and make technological and scientific risks to seem like problems about which the public can only listen, problems beyond the realm of public judgment, much work must be done both with and to scientific knowledge. However, the tension between judgment and expertise is everywhere present in discourse about bioterror. In Chapter 2, I show how a discussion developed in the 1960's over whether or not US research into biological weapons can be reasonably justified, given the possible dangers posed by not only their use but also weapons research and testing. Amidst the discussion, both politicians and military officials argue that there is no obvious strategic need for biological weapons with the US arsenal save a need articulated by civilian oversight. The Nixon Administration responded to the problem by asserting a description of the world that simultaneously makes abhorrent and necessary research into biological weapons. Through this logic, the ability to imagine an attacker makes necessary the actual development of the attackers weapons such that we can defend against them.

This vision of the future became real when the need to stockpile, distribute, and experiment on dangerous diseases makes possible both the 1984 Rajneeshee food poisoning and the 2001 anthrax mailings. Yet, the final explanations for each case fit neatly into Nixon's worldview – the attacks only make necessary more surveillance, more control, and more research. The substance of the problem lies in the irrational bioterror attacker and the non-expert

[78] For a thorough explanation of the limits of scientific inference within the context of risk and regulation, see especially Chapter 7 of Heather E. Douglas, *Science, Policy, and the Value-free Ideal* (Pittsburgh: University of Pittsburgh Press, 2009): 133-155. For a much more detailed discussion of how Habermasian argumentation might help solve the problem see also William Rehg, *Cogent Science in Context: The Science Wars, Argumentation Theory, and Habermas* (Cambridge: MIT Press, 2009).

public's panicked responses, but not entirely. The definition and naming of actual cases of bioterror present a hidden but substantial gap between the scientific description of a public health event and its description as a bioterror attack. The epidemiologist is able to imagine a human-caused contamination or outbreak and may even be able to rule out possible non-human causes, but epidemiology has its limits. According to the epidemiologists who worked the Rajneehsee poisoning epidemiology cannot offer positive proof of a human cause (though it can rule out other explanations). In the Amerithrax case the FBI offers a similar explanation of the limits of forensic science, claiming that science is simply unable to close cases. Thus, according to these narratives, the scientist is limited in his or her ability to explain the threat to the public. Instead, law enforcement acts as the relevant expert to define, solve, and respond to the event. This power to communicate courses of action to the public seems to grant them authority over science itself – law enforcement makes itself an expert about experts.

Thus, this investigation is a case study into the politics of risk construction through both history and the present. Whereas Keränen has already begun to tell the story of how bioterror risk is constructed through imaginative enactment in simulations, I show how bioterror risk is constructed through paranoid, imaginative enactment in the distant and recent past. Whereas simulations are used to tell stories about risks by imagining the future for us, history is used to tell stories about risk by imagining (or reimagining) the past. These stories – insofar as they act as definitions and equipment for living – attempt to make necessary certain responses. The history of biological weapons and bioterrorism is one that makes science both necessary and suspicious. Scientists, in this story, are scapegoats in complex ways. They are at once engaged in dangerous experiments at first required and then denounced by the government. They have the skills to build weapons and help keep us safe from them. As I show in Chapters 3 and 4, this

both gives scientists much political power and makes them the objects of great suspicion. They are, I argue, in many respects engaged in an accidental, skeptical battle against their own agency.

1.6 CONSTRUCTING AND INTERROGATING A RHETORIC OF BIOTERROR

The investigation that I propose is a reading of the history of the relationship between the old definitions of biological weapons and new definitions bioterrorism that tracks the shifting balance between the necessary attitudes of the skeptic and the paranoid. In sum, I create a history of biothreats which begins and ends with Nixon's renunciation of biological weapons. In Chapter 2 I show how he proposes a then-unknown human biothreat who would make necessary biodefense. In Chapter 4 I show how Bruce Ivins is made into both the product of and justification for Nixon's argument. The line between Nixon and Ivins is not causal, but it is noteworthy that Nixon's policies are couched in the same paranoid attitude which the FBI use to show that Ivins is guilty yet, it is also Nixon's policies which helped create the lab in which Ivins reportedly grew his anthrax. It is not as if there exists an unbroken chain of arguments from Nixon to the Amerithrax Summary, through which bioweapon definitions are neatly passed. Yet, the series of critical episodes that I explore in the Chapters that follow share much and do helpfully sample the struggle between skepticism and paranoia within the context of biothreats.

Because of all this, the narratives in the following Chapters are admittedly constructed. Much, for the sake of scope and thematic continuity, must be left out. That is, I am engaged in as much of a re-imagination of history as Nixon or Török is, and probably an overtly ideological reimagination at that.[79] However, this reimagining intends to be transparent insofar as my

[79] For an explanation of the importance and necessity of ideological criticism, see Philip Wander, "The Ideological Turn in Modern Criticism," *Communication Studies* 34, no. 1 (1983): 1-18; "The Rhetoric of American

methods for artifact selection and analysis are present to the reader. In describing the interpretation of the past, John Poulakos reminds us that "the past-as-it-was is irretrievable."[80] This is not a matter of hand-wringing about the limits of the humanities or affinity for some extreme post-modernist position, but a praise of argument and judgment. The problem of bioterror risk requires has high stakes, not the least of which is the actual human lives lost during the 2001 anthrax mailings – including the life of the alleged mailer. Even if we agree the claim that terrorists guilty of murder deserve the death penalty, it seems reasonable to be concerned with the way in which justice is served. These deaths are troubling, but what seems more troubling is the possibility that legal and official definitions of biological weapons and bioterrorism make it difficult to cultivate an audible skeptical voice. In what follows, I offer reasons to be concerned that, within the definitive discourse about bioterror, the paranoid attitude has begun to become unchecked by its former counterpart, the skeptic.

As I argued above, the current literature on biological weapons and bioterrorism does not already contain the history that I wish to interrogate, so in each chapter I locate a particular piece of definitive biothreat discourse and construct a history around it. In each chapter I have used slightly different methods for selecting texts to provide context for two reasons. First, I argue that each text exists in conversation with some other specific discourse. In Chapter 2, I place Nixon in conversation with politicians and journalists who are criticizing Administration policy in the press. In Chapter 3, I place Török et al. in conversation with both past and future accounts of the Rajneeshee food poisoning. In Chapter 4, I place the Amerithrax Investigative Summary in conversation with the National Research Council's review of that Summary. There is in these

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Foreign Policy," *Quarterly Journal of Speech* 70, no. 4 (1984): 339-361; "The Third Persona: An Ideological Turn in Rhetorical Theory," *Communication Studies* 35, no. 4 (1984): 197-216.

[80] John Poulakos, "Interpreting Sophistical Rhetoric: A Response to Schiappa," *Philosophy and Rhetoric* 23, no. 3 (1990): 218-228.

three chapters a move toward showing experts in conversation with one another because the relevant authority over bioterror discourse is frequently at issue between experts. Additionally, the artifacts in Chapters 3 and 4 cite one another and engage in an active conversation – a cooperative one in Chapter 3 and an agonistic one in Chapter 4. The second reason for this limitation is a practical one. While it is possible to succinctly generate a media history of biological weapons in the 1960's, it is quite difficult to construct a similar media history surrounding the 2001 anthrax mailings. Such a venture would almost certainly present the critic with interesting grist for mill, but it is beyond the scope of the present dissertation. What would be lost in such a treatment is the connection of 21st century bioterror discourse to the generally overlooked biological weapons discourse of the mid-20th century and it is a demonstration of that link that is of central import in this investigation. Critics seem prepared already to say that many aspects of the Amerithrax investigation were problematic, and a critic would be right to say that the investigation must be understood as an example of a problem in the present – institutional failure, perhaps. However, I add as a friendly amendment to such a position that the problem is also much deeper and more complicated – it is a problem with deep historical and political roots that grow deeply into domestic and international law as well as popular and expert narratives on biothreats. If, as I argue, part of the reason why the Amerithrax investigation was so fraught flows from an enactment of the paranoid attitude, critics would do well not to cast the FBI in conspiratorial terms. The investigator is a kind of necessary paranoid within an adversarial system, but in the kinds of cases that I detail below there is no substantial skeptical adversary to push. Even worse, the skeptical adversary (the scientist) may be a suspect.

In the following three chapters, I trace the roots of bioterror definitions through three historical phases: the transition from offensive to defensive bioweapon research, the transition

from a history of bioweapons to a history of bioterror, and the galvanizing moment of American bioterror history within the context of the war on terror. Each historical moment contains a conversation about the nature of biothreats, though each conversation has a different point at issue: location, materials, and motives. In turn, these moments provide a space to inquire in Chapter 2 where bioterror comes from, in Chapter 3 what sorts of material facts obtain in a case of bioterror, and in Chapter 4 what sorts of motives drive the bioterrorist. This progression shows already how I understand the movement of expertise with respect to bioterror risk, as well as how the dynamic between skepticism and paranoia shifts in concert. While the authorizing advice on Nixon's bioweapon policy came from the practical politics of Melvin Laird and Henry Kissinger, it is a panel of paranoid behavioral psychologists who would seem to provide the final say on the particular case of Bruce Ivins. What Nixon and the Amerithrax Taskforce engage in is nothing less than a definition of political reality. Török et al. assist in this project of definition as helpful skeptics, but only thanks to the authorization of the FBI. In making this definitive project visible to the reader, I aim to show how desperately non-experts need researchers like Galamas to identify with and not against them. There is no non-pragmatically grounded "true meaning" underlying the bioterror risk, and by claiming there is security researchers risk casting citizens as part of the conspiracy against biosecurity. The definition of a risk is nothing other than the response that it requires, and that response it is a matter for deliberation. That deliberation will remain difficult until the way in which the paranoid attitude has come to dominate the definition of bioterror is visible enough to confront and counter with reasonable skepticism.

2.0 RELOCATING SUSPICION

> Under the cloak of national security there is reason to speculate that some of the most hideous and debasing forms of human warfare are being manufactured at the expense of the unsuspecting tax-payer.
>
> - Senator Gaylord Nelson 1969 [1]

The most visible, single event that shaped the biothreat narratives of skepticism and paranoia during the 1960's was Nixon's 1969 announcement that the United States would renounce the use of any and all biological weapons. The announcement was the end point of a nearly year-long drama that unfolded both within the Nixon Administration and between the White House and the Pentagon. While Nixon's choice to renounce the use of Biological and Chemical Weapons had certain inarguably positive consequences (it helped build broad international support for the Biological and Chemical Weapons Convention), it is important to understand that Nixon's decision was also a response to intense, domestic political pressures. Deep in the quagmire of the War in Vietnam – controversial in and of itself, but also because of the Army's use of tear gas on the Viet Cong guerilla[2] - the Nixon Administration needed to respond to public criticism, especially criticism from prominent Senators and Congressmen.[3] More specifically,

[1] "Nelson Asks for Chemical War Probe," *Washington Post-Times Herald*, March 24, 1969, A6.

[2] Jonathan B. Tucker and Erin R. Mahan, "President Nixon's Decision to Renounce the US Offensive Biological Weapons Program," (Case Study, National Defense University, Washington DC, 2009): 2, accessed November 30, 2014, http://wmdcenter.dodlive.mil/2010/10/01/wmd-case-study-1/.

[3] Secretary of Defense Melvin Laird gives this as an explicit reason for starting the review process that ended with the Nixon's announcement in Memorandum From Secretary of Defense Laird to the President's Assistant for National Security Affairs (Kissinger), Washington, April 30, 1969.

Legislators (like Nelson, above) and journalists repeatedly and publically told anxiety-ridden and suspicion-laden stories about secret government programs to build dangerous chemical and biological weapons. Even worse, these stories suggested that the US Army was engaged in testing these terrifying weapons on American soil. Nixon, in his eventual policy response to these criticisms, artfully embraced and relocated the paranoia related to biological and chemical weapons. Nixon's speeches on the policy shift serve as representative anecdotes for the ways in which the scattered skeptical and paranoid dramas of biological weapons were made sense of and converted into a single, simple paranoid narrative. Within the text of his two short speeches Nixon alleviated and concealed the tension between policy and action. In his speeches, Nixon related a then-untold History of US bioweapon policy that both justified the public paranoia about biological weapons while directing attention away from the US Army and toward shadowy enemies abroad.

2.1 THE RESHAPING OF THE BIOTHREAT

On November 25, 1969 Nixon announced the administration's new weapons policy twice – once in "Statement on Chemical and Biological Defense Policies and Programs" [4] at Fort Detrick, MD and then in "Remarks Announcing Decisions on Chemical and Biological Defense Policies and Programs"[5] from the White House's Roosevelt Room. The two speeches have much in common, and they presented both an unambiguous explanation of the policy decisions

[4] Richard Nixon, "Statement on Chemical and Biological Defense Policies and Programs" (speech, Fort Detrick, MD, November 25, 1969), accessed November 30, 2014, http://www.presidency.ucsb.edu/ws/?pid=2343.

[5] Richard Nixon, "Remarks Announcing Decisions on Chemical and Biological Defense Policies and Programs" (Washington, DC, November 25, 1969), accessed November 30, 2014, http://www.presidency.ucsb.edu/ws/?pid=2344.

and a statement about the ways in which the new policies would contribute to peace. To summarize, Nixon announced three changes in military practice: (1) a pledge never to use lethal or incapacitating biological weapons in the future, (2) a narrowing of biological weapons research to focus only on defense from natural and intentional outbreaks, and (3) a less explicit promise that current stocks of biological weapons will be destroyed.

As Nixon told it, the immediate problem he was confronting was an absence of clear policy with respect to a group of highly dangerous technologies. In both speeches Nixon described Biological Weapons as having "massive, unpredictable, and potentially uncontrollable consequences" that "may produce global epidemics" and impact the "health of future generations."[6] In both speeches Nixon also named peace as a reason for the policy shift and, in both speeches, closed by saying that, "Mankind already carries in its own hands too many of the seeds of its own destruction. By the examples we set today, we hope to contribute to an atmosphere of peace and understanding between all nations."[7] In the Roosevelt Room speech – the speech to the American public – Nixon also used peace as the primary description of the policy action and begun the body of his speech by calling his policy action as "two steps toward advancing the cause of peace and reducing the terror of war."[8] Though the speeches share similar ends, the Detrick speech is decidedly more procedural in content and contained little more than a restatement of the Administration's support of the Geneva Protocol and a careful statement of the new policy.

The Geneva Protocol, however, presented problems for the Administration. Even in his statement to the public, Nixon revealed some of the ambivalence that lay at the heart of the

[6] Nixon, "Statement."; "Remarks."
[7] Nixon, "Statement." In "Remarks" Nixon adds "…and among men."
[8] Nixon, "Remarks."

United States weapons policy, as he simultaneously requests the Congress to ratify the 1925 Geneva Protocol (which bans first use chemical weapons) and reassures the public that this "has been affirmed by the United States as a matter of policy." While it is certainly true that the President can affirm policy not written into law, the failure to ratify the Geneva Protocol created a difficult ambiguity between the ways in which the United States has affirmed what are and are not acceptable means of warfare. This is especially clear (and ironic) in the introduction to Nixon's Detrick speech when he explained why a policy review was necessary at all: "There had been no such review in over 15 years. As a result, objectives and policies in this field were unclear and programs lacked definition and direction."[9] Nixon called into question the meaning and purpose of chemical and biological weapons research while standing at the doorstop of the very labs that carried that research out. Thus, it would seem that one branch of the government had promised not to use a group of weapons technologies while another branch of the government had funded development of that same group of weapons all the while. While this is not *necessarily* a contradiction, it does at least call out for an explanation.

In his speeches, Nixon announced that he had asked the Department of Defense to recommend measures to dispose of existing stocks of biological weapons, but the labs and Fort Detrick would remain. While the biological weapons must be disposed of, the labs will be beaten into plowshares and "confine [their] research to defensive measures such as immunization and safety measures."[10] In his speech from the Roosevelt Room, he called this new research program "biological defense" and explained its purpose as the inverse of the biological weapons – whereas the weapons "may produce global epidemics" this new defense research would be

[9] Nixon, "Statement."
[10] Nixon, "Statement."

directed toward "controlling and preventing the spread of disease."[11] He further underscored the benefits of such a program, saying that it might "break new ground with regard to immunization."[12] In his speech at Detrick, this message was omitted and replaced with a promise that the policy changes "will [not] leave us vulnerable to surprise by an enemy who does not observe these rational restraints [because] [o]ur intelligence community will continue to watch carefully the nature and extent of the biological programs of others." The connection between the newly directed research and the apparently already occurring intelligence was given no more definition in the speeches. In leaving these details unstated, Nixon's speech declared a solution to one problem (the ambiguous objectives and directions of the old research) while foreshadowing one that would emerge in the decades to come (the means by which we translate intelligence into protection against 'surprise').

Nixon's announcements offered an explanation for the events that led up to them. According to the narrative, whatever trouble came before the policy shift was caused by the Administration's lack of knowledge of its own policies.[13] Further, the policies that existed were running without proper goals. Nixon, through his review, provided solutions to both problems. Nixon claimed that, under the Eisenhower Administration, talk of bio-chemical warfare was "taboo," and that:

> …it was felt when we came into the administration that we should examine all of our defense policies and defense capabilities, because it has always been my conviction that what we don't know usually causes more fear than what we do know.[14]

According to Nixon, it was inappropriate for the government to appraise what the government itself possessed. On the one hand, this seems to be a reasonable problem faced by all complex

[11] Nixon, "Remarks."
[12] Nixon, "Remarks."
[13] Nixon, "Remarks." Nixon reflects that he has felt this way for 8 years, since the Eisenhower Administration.
[14] Nixon, "Remarks."

institutions – the left hand may not know what the right hand is doing. However, Nixon's reliance use of "we" in his Roosevelt speech presents an interesting narrative. When Nixon uses "we," he clearly sometimes meant his Administration and/or his National Security Council. In these cases, Nixon described (as above) how he and his staff wanted to do a review so that they could know. However, in describing the impetus for his review and the new policies, Nixon expanded the "we" so as to possibly imply the United States as a unit that "indicates its support" or at least the government working as a unified whole that can "break new ground with regard to immunization."[15] Nixon sets himself as Executive against an unknowing, monolithic system that does not know itself or, at least, does not want to know about itself. Nixon used this equivocal "we" far less in his Detrick speech because what it affords him in the Roosevelt speech is simply unavailable at Detrick. The equivocal "we" allows Nixon to avoid naming something which must be true – even if no one can articulate the link between the law and the biological and chemical research programs, the programs themselves are quite robust and administrated. The men and women (both civilian and military) at Detrick were exactly the people in the system who knew what the US capability was – they had built it up themselves under "unclear" policies. They had published mountains of internal reports and carried out experiments which were funded, in part, through bills passed by the US Legislature. Thus, Nixon ran together several very different kinds of "we" without naming explicitly what his speech must imply – there were US citizens building up these terrible weapons all along, we (that Administration) have been paying for it. We (the Administration) have not asked many questions and *they* (the Army) have not been forthcoming. The "we" that Nixon used when speaking to the public implies the 'they,'

[15] Nixon, "Remarks."

but Nixon simply changed the "we" during the speech so that it swallows up the 'they' in the end. In the Detrick speech, the 'they' is radically present while the "we" is suppressed.

All at once, Nixon echoed the public's fears of the US bioweapon program, announces his own ignorance of them, and declares himself the decider of their future. Nixon's renunciation of chemical and biological weapons marked an important shift in both policy and rhetoric, but what exactly it was a shift away from and toward is only evident in light of the political, rhetorical, and media events that preceded it. In what follows, I demonstrate how the events leading up to Nixon's remarks both fit into and extend beyond the narrative that Nixon attempted to impose on them. 1969 was a watershed for the political discourse surrounding biological weapons. Congress debated a military procurement bill that proposed expansions to biological weapons research, the Army was actively using chemical weapons in Vietnam, students protested secret defense research at Stanford University, several livestock deaths linked to US weapons facilities captured the public imagination, and the international community was simultaneously engaged in the Strategic Arms Limitations Talks (SALT I) and replacing the Geneva Protocol with what would later be known as The Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological and Toxin Weapons and on their Destruction (BTWC). In the national news during the late 60's, these events continued to circulate – thanks in part to coverage of vocal American politicians like Representative Richard McCarthy and Senator William Fulbright as well as activist-scientists like Matthew Meselson – and collided together into one, continuous paranoid drama. These debates and negotiations demonstrated a tangible ambiguity in the relationship between the United States and biological weapons, and in the space made by that ambiguity a suspicious, apocalyptic vision emerges. When the Nixon Administration formally renounced research into biological weapons and

developed a public-facing policy on biological weapons, a series of rhetorical and cognitive shifts began in the public conversation about biothreats. That is, the Administration's new policies affected how and where certain kinds of experiments were carried out as well as how journalists and politicians talked about the nature of those experiments. Nixon's new policy did not put an end to the paranoia, but instead relocated the objects of suspicion. As the ambiguity surrounding bioweapons faded, so did the urgency of the various historical events: the procurement bill was passed, a policy was set for chemical weapons in Vietnam, Stanford cut defense research, livestock deaths were investigated, SALT I got underway, and progress on BTWC seemed realizable. Rep. McCarthy, the once vocal bioweapon critic, left his seat in the House in order to run for Senate, but lost a primary that ended his political career. By the spring of 1970, the press' coverage of biological weapon-related issues slowed to a trickle. During this relatively short period of time, bioweapons and biothreats were brought vividly into public conversation. During this public conversation bioweapons and biothreats became, literally, a matter for debate. What kinds of experimentation were risky? How much risk was too much? Many questions emerged and, finally, Nixon seemed to answer them.

In this chapter I will demonstrate how highly speculative media coverage of a series of political events briefly created an opportunity for a unique national conversation about biothreats. Below, I assemble a cross-section of the national media history of biothreat perception in 1969, primarily by calling attention to recurring stories and themes that appear in the *Los Angeles Times, The New York Times,* and the *Washington Post* during the years in question. The recurring themes and stories center on a questions of location – where is it that biothreats are located? This question cuts two ways – where are they *present* and from where do they *originate*. As I demonstrate below, these questions are often presented as rhetorical

questions – biothreats are present *here* and they come from *here* too. During much of this public debate, the substance of the evidence for the riskiness of US Bioweapon policy and practices was quite spotty. While disclosures eventually made by the government vindicate many of the narratives, they are initially founded on circumstance, suspicion, and little positive evidence. The Nixon policy shift changed the conversation such that it was no longer possible to say that biothreats *originate* in the United States and, as a result, they are not *present* here. Nixon validated the general paranoia about biological weapons while moving the appropriate object of that paranoia beyond the borders of the United States. Nixon's new policy seems remarkably successful in this regard.

Tracing this shift is important because contemporary discourse about bioterror is, I argue, importantly related to this much older narrative about biothreats in two important ways. In the conclusion to this chapter, I describe a series of shifts in both biothreat rhetoric and practice as well as responses to and preparations for biothreats, from which a new biothreat narrative emerges. Key amongst these shifts is an emphasis on defense (below, I describe what I refer to as the Nixon Administrations "rhetoric of defense"), especially against what military officials in the 70's refer to as "technological surprise." These shifts pave the way for the creation of what Andrew Lakoff has called the "generic biothreat"[16] and enable the peculiar rhetorical synergy between the rhetoric used to characterize disease and terrorism. This will be my focus on in chapters 3 & 4. As I show, especially in those later chapters, these shifts make possible an almost effortless application of the paranoid attitude.

In this chapter, however, it will be my goal to develop the dynamic between the skeptic and the paranoid attitudes through pursuing the following question: in the last 50 years, where

[16] Andrew Lakoff, "The Generic Biothreat, or, How We Became Unprepared," *Cultural Anthropology* 23, no. 3 (2008): 399-428.

have we understood biothreats to have come from? While such a question could be answered empirically, I hope to answer it rhetorically and narratively. In the 1960's journalists and politicians begin to argue that biothreats can possibly come from 'here,' i.e. the United States. Below, I show how these arguments are made and how Nixon rebuts them in his 1969 renunciation. In chapter 3 & 4 I trace the consequences of Nixon's rebuttal, especially as his rhetoric of defense collides and synergizes with post-9/11 rhetoric and the language of the Biological Weapons Convention collides and synergizes with the PATRIOT Act.

2.1.1 Selection of Texts

In order to find and describe the various narratives that appear in stories about biothreats and bioweapons, a large pool of readings was selected from the ProQuest Historical Newspaper databases for both the *LA Times*, *The Washington Post*, and, to a lesser degree, *The NY Times.* These were selected for three reasons. First, each of these papers had national circulation over the entire period of time that this study is concerned with: 1960 – present. Second, all three are full-text indexed back to the 19th century. Third, preliminary keyword searches primarily yielded results from these papers. Thus I have chosen to survey those national newspapers which make up the intersection of most available articles for searching and most relevant articles from searching. For the key years in question (1969-1984), articles were selected if they matched with any combination of the terms "germ," "bio," and "biological" with the terms "weapon," "war," and "warfare" or the frequently used acronyms "BW," "CBW," or "CBRN." Articles were first skimmed to ensure relevance, and removed from the pool only if the article was substantially about some other topic. This was often the case in *Washington Post* articles – political pieces about a range of issues might, for example, update readers about the status of the chemical and

biological treaties being discussed in the early 1970's. When stories emerged that linked to prior coverage (such as the 1968 Skull Valley Sheep Kill), that coverage was added to the pool. Similarly, in order to grasp the total scope of coverage on a given story, I have occasionally added articles from other national newspapers. Often one paper breaks a story and another paper picks up coverage *en media res*. As a result, I have often not included coverage that is redundant, especially when a single article is run as an exact duplicate in two papers. In those cases I consider at least the first version run or the version run in the paper for which the author of the article works.

Assembling a history using newspaper coverage does create certain problems. Stories often speculate without much apparent evidence and even seem to purposefully build up drama and theatre by associating certain topics together, repeating and reframing old stories to make them seem relevant or newly shocking. Further, politicians and foreign countries are often transformed into two-color heroes and villains of predictable dramas. Finally, it often seems as if some of the stories that appear in the paper do little more than keep a given story alive in the news cycle and add little to the actual narrative. While these are problems that stand in the way of a historical recounting of the events, my intention here is simply not to do this. Instead, it is my goal to demonstrate exactly how there is a shift in these dramatic ways of talking that bends around Nixon's 1969 policy shift. What I hope to lay out here is not an historical account that tells the truth about what happened, but an account of what was said. I assemble a collection of stories that, together, serve as a narrative landscape from which we can see bioterror and its associated themes emerge and become concrete. One of the challenges in talking about skepticism and paranoia will be the natural tendency to ignore the paranoid character of arguments whose conclusions turn out to be right. While a speaker can certainly choose whether

to speak in a skeptical or paranoid style, there are surely unintentional or at least unreflective skeptics and paranoids. Because of all of this, it will be important not to confuse whether or not some particular speaker turned out to be right or not with whether or not they were speaking or acting with a paranoid or skeptical attitude. My concern here is only to locate and describe these attitudes – to make them visible. It is not always clear when it is good to be paranoid or skeptical, but it is a problem, I argue, that paranoia and skepticism can become a problem when purposefully hidden, forgotten about, or used in the extreme. For now, however, I focus merely on description.

2.1.2 In the Shadow of Dead Sheep

Throughout 1969, both the *Washington Post* and the *LA Times* kept alive stories about suspicious experiments, "unexplained" happenings, and frightening accidents. Taken together, these stories make two interrelated, paranoid claims. First, the government is engaged in secret bio-chemical experimentation on its own shores. Second, the existence of the experiments demonstrates that the government prioritizes the experiments and their secrecy over the safety of American citizens. Narratives about biothreats and bioterror are not, of course, necessarily paranoid narratives. What makes these narratives paranoid is the way in which the existence of a biothreat is justified or evinced – proximity, correlation, a failure to falsify such a claim, absence of evidence for other explanations, etc. As I will show in this chapter, the exemplary paranoid biothreat narrative asserts that such-and-such phenomena *must* have been caused by a madman or, when the term becomes more widely circulated and legally tied to bioweapons, a "weapon of mass destruction." When taken to its limit, this way of seeing the world converts immediately possibilities into actualities. If there might be a bioweapon, there is one. If a bioweapon might

have caused some event, it did so. If an individual seems suspicious, they are guilty. During the period of time at interest in this chapter, the stories about bio-chemical weapons tests and test sites blur the lines between the possible and the actual by transforming possible dangers into certain risks. In contemporary terms this is either tautological or meaningless because, in the Risk Society, all risks (as potentials) are certain. What I mean to show here is the emergence of a prototypical risk language.

Of parallel import is the fact that the stories locate the danger of bioweapons *inside* of the United States. Bioweapons are here and come from here. In this narrative, the bioweapon struggle exists between the American public and its government. It is helpful to keep in mind that prior to Nixon's pronouncements an additional ambiguity exists between chemical and biological weapons. The account of the Skull Valley Sheep Kill, detailed below, demonstrates that an event which seems not to be properly about biological weapons at all – the military eventually supports a version of the story in which it was at most a chemical weapons test gone awry - can nonetheless be connected intimately to biological weapons in its narrative context. Chemical and biological weapons are difficult to separate in policy and were impossibly intermingled in the public stories of the 1960's and 1970's. As I demonstrate below, the need for a border between the biological and chemical is central to the Nixon policy shift and chief among Secretary Laird's concerns about terminology.

In March of 1968, several thousand sheep fell ill and died in Skull Valley, Utah.[17] According to the article that broke the story in *The Washington Post*[18], the location of the sheep

[17] Victor Cohn, "'Sea' of Dead Sheet Probed," *Washington Post and Times-Herald*, March 21, 1968, A1

[18] The story broke nationally on March 21 in both *The Washington Post* (cited above) and the *New York Times*, with the times publishing a story from the AP wire. The story broke in the *LA Times* two days later when the *Times* reprints a story by *The Washington Post's* Victor Cohn. Between March 21 and March 31 of 1968 (11 days), the three newspapers, collectively, published twenty-seven articles on the sheep kill – almost an article per day per

deaths sits "20 or 30 miles from the Army's main site for field-testing chemical and biological weapons," and the manner in which the sheep die – "weakening and staggering, then dying within 24 hours – arouses suspicion of nerve damage."[19] Immediately after the event a spokesperson at Dugway claimed that the Army was "definitely not responsible" and that "[army] scientists have ruled out programs which are part of [Dugway's] mission."[20] As coverage of the story continued, new elements emerged and contributed to a paranoid, guilty-by-association narrative. Federal and State officials claimed that a nerve agent was tested at Dugway in the days leading up to the deaths[21], veterinarians and pathologists ruled out insecticides and known diseases as causes[22], and the veterinarians themselves became ill.[23] The Army carried out tests to determine whether or not sheep exposed to nerve gas-contaminated hay die similarly.[24] In the end, The Army approved a payment of $376,685 to the livestock company that owned the sheep even though Army officials maintained that no actual proof existed that the sheep died because of the tests.[25] What becomes undeniable is that the sheep died *near* Dugway and *after* nerve gas tests were done. Though the Army did not formally admit any wrong-doing, the sum of their proximity and association with secret weapons formed a foundation for their 'obvious' guilt. The settlement would seem to confirm that the Army understands not only the

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paper. By the end of March, the story had drifted from the front page to page 90 of *The New York Times*, but in *The Washington Post* it stayed above A3 until March 29 and remained in section A until April, when the *Post* stopped covering the story.

[19] Cohn, "'Sea'."

[20] Quoted in Cohn, "'Sea'."

[21] Victor Cohn, "Sen. Moss: Nerve Gas Was Used in Sheep Area," *Washington Post and Times-Herald*, March 22, 1968, A1.

[22] Cohn, "Sen. Moss"; Victor Cohn, "Utah Officials Blame Gas in Sheep Deaths," *Washington Post and Times-Herald*, March 23, 1968, A1; Victor Cohn, "Signs Point to Gas as Killer of Sheep," *Washington Post and Times-Herald*, March 23, 1968, A1.

[23] Drew Pearson and Jack Anderson, "Vets Examining Utah Sheep Also Ill," *Washington Post and Times-Herald*, April 1, 1968, B11.

[24] Victor Cohn, "Sheep Died From Gas, Tests Hint," *Washington Post and Times-Herald*, April 3, 1968, A10.

[25] "Sheep Owner's Claim of $376,685 Approved, Other Actions Expected," *Washington Post and Times-Herald*, July 11, 1968, D7.

validity of the guilty-by-association logic, but also its soundness. This formula of event-demanding-explanation plus proximity-to-dangerous-base recurs throughout stories about biothreats. Dugway and other weapons testing facilities function, literally, as accidents waiting to happen or be discovered. Stated this way, it is difficult to see why it might not be obvious that the Army did in fact kill the sheep, but as the story first developed it is not at all clear that the stories about the dead sheep amount to anything other than sensational innuendo – a paranoid drama in which no other plausible story emerges simply because no other possible explanation is treated as equally plausible.

Throughout the sheep kill coverage, a tension is sustained between what could have happened and what experts can prove did happen. Victor Cohn's *Post* articles often comically demonstrated this tension through two-part titles. For example, in "Sheep Died From Gas, Tests Hint," the two sided title draws attention to the dramatic, graphic part of the event (the sheep deaths), linked it to its claimed proximate cause (the gas), and only concludes with the slight qualification that no one has yet demonstrated that the sheep did indeed die because of the gas. What is the nature of the "hint?" The content of the article repeated the pattern in reverse. According to the officials actually quoted in the article, the question "remains unanswered" but "we [the Army] are highly suspect."[26] The title and content, thus, keep in balance a tension between suspects and evidence. In "Signs Point to Gas as Killer of Sheep – But Proof Isn't Conclusive," the title and subtitle repeated the tension. The signs pointed to the gas and acted even as proof, yet that proof is "inconclusive." Surely Cohn and his editors were being careful

[26] Brigadier General William Stone, quoted in Cohn, "Sheep Died." Cohn's article is not entirely clear, but it seems that he is quoting Stone out of context. Stone is quoted elsewhere as saying "We fully recognize, with this occurring right on our doorstep and probably involving a chemical similar to materials we have been testing, that we are highly suspect." Here, his meaning seems to be that Stone understands why people suspect the Army, not that Stone believes the Army is actually the likely suspect. The longer quote can be found in "Army Concedes It May Have Killed Sheep," *Washington Post and Times-Herald*, March 26, 1968, A3.

not to overstate the case at a moment in which the Army was publically denying having caused the sheep kill. Nonetheless, this pattern of naming and storytelling made uncertainty a key feature of the story and then transforms and focuses the meaning of that uncertainty. What is inconclusive proof and how does it function? It would seem to be opposed to some other kind of proof – conclusive proof, proof from which one could draw some reasonably certain conclusion. Thus, inconclusive proof must be some sort of suggestion or association. Here we see the way in which the skeptical and paranoid attitudes stand in tension. The skeptic would recognize that some causes have been ruled out, but no single explanation fits all the available facts.[27] Told this way, such a story hardly has a name – there is little to be said except that 'more testing needs to be done.' We must wait and see. All investigators – both military and veterinary – were in agreement that some toxin was at work, but problems emerged. One candidate, a common insecticide, could not be found through environmental tests. The other candidate, a military toxin, could also not be found and should not have been able to persist in the environment. Both seemed plausible and possible, but neither could be confirmed through scientific tests. However, while the scientists continued to test, the headlines continually suggested that the tests amounted primarily to a failure to falsify the 'obvious' culprit – the army. If the Army was not ruled out by the tests, this confirms that the Army *could* be responsible. This makes good sense. Yet, since all the stories are framed in this way, they tend to reify the potential danger created by the Army testing site. Whether or not, as a fact of the matter, the Army toxins killed the sheep, the possibility that the sheep were killed by the Army toxins seems to make more substantial the actual danger of the base.

[27] In both Cohn, "Signs Point" and Cohn, "Sheep Died," some puzzles remain unexplained. Chiefly, the most likely toxin on the base should have dissipated in the environment prior to killing the sheep. No explanation is ever provided.

The story left the news cycle in April of 1968, but returned twice. First, coverage returned in October of 1968 when the government approved the Army payout to the ranchers and, second, in April of 1969 when Dugway Proving Ground restarted open-air weapons testing.[28] This renewal of testing emerged amidst a series of hearings and challenges to the government's pursuit of chemical and biological weapons. By mid-April of 1969, Representative Richard D. McCarthy had already begun his public crusade against the Pentagon's biological and chemical weapons policies – questioning both the substance of US policy as well as the secrecy of it.[29] In 1968, the sheep kill was a unique event, interesting and controversial in its own right, and the stories about the sheep deaths focus on Dugway as the location of the problem. However, by 1969 the sheep kill and the reasons for suspecting the Army had become reorganized. As new stories were put into the conversation, the sheep kill was shown to be just one of many suspicious happenings that occurred in and around Army test sites. Thus, it is not just proximity to the Army that proves the Army's guilt – the Army becomes the sort of organization to be suspicious of already. Yet, it is quite difficult to say which stories serve as proof that the Army is suspicious and which stories use that proof to show that the Army should be properly viewed that way. The stories are taken together like an obvious whole, an elaborate story that has pulled itself up by its own bootstraps. This is how narratives about complex events are built when the need to name an event and assign blame outstrip the availability of helpful evidence. This is the utility of the paranoid attitude – it provides names, descriptions, and conclusions.

[28] Spencer Rich, "Nerve Gas Tests Resumed in Utah," *Washington Post-Times Herald*, April 27, 1969, A3.

[29] Warren Unna, "Soviet Leads in Chemical Warfare," *Washington Post-Times Herald*, March 5, 1969, A3; "Hill Probes Biological Warfare," *Washington Post-Times Herald*, March 8, 1969, A2; "Rep. McCarthy Urges Ban on 'Germ War' Stock," *Washington Post-Times Herald*, April 22, 1969, A9.

These stories, though convoluted and dramatized, accord with the facts –paranoia, as I use it here, is a judgment about how a conclusion is drawn and not whether that conclusion turns out to be right. Dugway Proving Ground was (and is) the "nation's Major Range and Test Facility Base for Chemical, Biological, Radiological, Nuclear, and Explosives."[30] It is reasonable to think that open-air testing of a chemical agent might harm nearby animals, regardless of what the Army will and will not accept responsibility for. Whether or not we can "prove" guilt is not at issue here, only what kinds of stories get told in the presence of merely 'inconclusive proof.' Possibility is, of course, easy to prove. For example, in the latter half of 1969, the *Washington Post* reported three times on a story involving the 'mysterious' deaths of cows near Frederick, MD – the home of Fort Detrick, the famed Biological and Chemical research facility at which Nixon later gave his policy speech. In June, July, and August the *Post* reported, essentially, the exact same story three times in a row. "Mysterious Illness Hits Cattle Herd," provides the core of the story.[31] One John H. Hall of Gas House Pike, MD wrote a letter to Rep. Richard D. McCarthy to inform him that 80 of Hall's cows had died over the last seven years under mysterious circumstances. The story quoted officials at Fort Detrick, Hall, and Hall's lawyer as saying that Fort Detrick is in fact not to blame, even though the cows died downstream from the military facility. It is not entirely clear why Fort Detrick was mentioned at all in the story, save to insist that it did not do anything wrong. Hall's lawyer even explained why he believed the cows died – bad feed. However, in the second version of the story, "Cause Not Found for Death of Cows," these reasons were left out of the account, leaving only the mysteriously dead cows and Detrick's report denying wrong doing.[32] Finally, the story took on

[30] "Mission," accessed November 19, 2014, accessed November 30, 2014, http://www.dugway.army.mil/.
[31] John Hanrahan, "Mysterious Illness Hits Cattle Herd," *Washington Post-Times Herald*, June 25, 1969, A28.
[32] "Cause Not Found for Death of Cows," *Washington Post-Times Herald*, July 19, 1969, A4.

completely new meaning in "Probes at Detrick Seen as Unreliable."[33] Here, McCarthy exploited the guilty-by-association pattern by asking the army to prove what is almost certainly not possible – "definitive proof" that they were not responsible for the cattle deaths even in the face of the fact that the farmer had already agreed that there is probably another explanation. How the Army could prove this negative conclusion is not clear, given that that autopsies already reported on were inconclusive. The reports of Hall, Hall's lawyer, and the non-Army scientists became irrelevant. The Army had denied responsibility and now the denial is the story (as it was in the Sheep Kill). As a matter of record, Detrick (like Dugway) worked with dangerous chemicals and disease agents. As a matter of fact, the cows died near Detrick. The Army could be the cause and we cannot believe their reports. The failure to falsify a possibility reinforces the presence of a possibility.

To the paranoid, this is justification to conclude the Army's guilt and responsibility. What other explanation could there be? When set beside the case of the Detrick cows, the paranoid aspects of the Skull Valley Sheep Kill are easier to see. Both cases have an event-demanding-explanation plus proximity-to-dangerous-base. Both cases have a non-conspiratorial hypothesis that remains unverified – the sheep could have died from an undetected insecticide and the cows could have died from contaminated feed. Both cases, due to their proximity to a base, have a much more dramatic and shocking possible cause – dangerous Army tests. Which conclusion should we cleave to in such cases? The paranoid, already suspicious of the Army, naturally suspects the Army in the specific case at hand and stands in disbelief to any exculpatory evidence provided by the only party who knows enough about biological and chemical weapons. For those like McCarthy who are hoping to put pressure on the

[33] John Hanrahan, "Probes at Detrick Seen as Unreliable," *Washington Post-Times Herald*, August 1, 1969, B8.

Administration, whether or not both the cows and the sheep were killed by the Army may not be relevant. If the goal is to move policy, then paranoid has obvious utility.

However, as the guilt-by-association narratives proliferate, more and more stories are swallowed up into the grand, paranoid drama point toward the Army. In February of 1969, the work of a Smithsonian research group came briefly under scrutiny because of the research's funding source – the Armed Forces.[34] Though a Smithsonian official said that the Institute drew up the study before the Army showed interest in funding it, a Pentagon official confirmed that the results of the study were sent to Desert Test Center in Salt Lake City for analysis. The fact that bird migration data was being studied at a Germ Warfare center was presented as a suspicious puzzle easily solved by quoting a zoologist who explained that "birds can be used to carry germs in biological warfare once their migration patterns are known" and (the not yet famous) Seymour Hersh who suggested that the Defense Department was looking for an area outside of migratory paths that could be used as a germ test site.[35] The *LA Times* subsequently repeated all three claims, calling the Smithsonian study "a cover." An NBC correspondent described the experiment as "a checkout of an animal delivery system for chemical-biological warfare," a Senator explained that "they were looking for a relatively safe place to conduct chemical and biological warfare testing," and "the Smithsonian has stated it knew nothing about a biological warfare testing program related to its bird study."[36] As with the dead sheep, the Smithsonian's tagged birds suffered from guilt by association. Whether the Smithsonian knew (or was willing to admit they knew) what the Army wanted to do with the migratory data or not was treated as either irrelevant or unbelievable. The Army looked at the data; the Army was

[34] Stuart Auerbach,"Smithsonian Bird Research Tied to Germ Warfare Study," *Washington Post-Times Herald*, February 5, 1969, A7.
[35] Auerbach, "Smithsonian."
[36] "Smithsonian Study Linked to War Tests," *Los Angeles Times*, February 4, 1969, A17.

involved in secret experiments. If the bird study was a weapons test, it would be necessary to review the data. The data was reviewed. The paranoid happily affirms the consequent because no other explanation can suitably outweigh suspicion.

In the case of the bird study, this loose chain of reasoning leads to a startling narrative possibility – that almost anything can be understood as biological weapons testing. The *LA Times* story subsequently referred to the bird study (which involved tagging and tracking birds) as a "chemical-biological warfare test" and then confirmed that "[n]o germs were involved." Here, we have a weaponless weapons test, a warfare test that does not simulate (in any obvious way) warfare. This way of talking is quite startling in contrast to the 1969 policy change. Prior to the change, it would seem to be the case that even the most removed events can be construed as weapons tests. After the policy change, even weapon simulations are not, technically, weapons tests. How a study about birds could be so easily linked to biological weapons was explained with ease by Senator Joseph Clark who told reporters that "The Army has been scared off from Utah by the sheep deaths" - the Army needs a new test site.[37] Even if the Army was not with the Smithsonian bird trackers, the Army's money was there and the Smithsonian's data was later with the Army. This loose chain of reasoning enabled a way of thinking about domestic biothreats that Nixon's policy shift would later attempt to curtail. After the policy shift, it will be the Administration's position that no material conditions are sufficient to demonstrate that the Army is involved in Chemical-Biological warfare tests. Such tests do not exist, have never really existed except as a result of mismanagement, and cannot exist because the goals of the Biological Defense Research Program are directed elsewhere.

[37] "Smithsonian."

2.1.3 Overwhelming Risks and the Shift Toward a Solution

Nixon's policy is a solution to the ambiguity and uncertainty as well as the anxiety and suspicion which thread through the biothreat stories above – it is an explicit naming operation that directly responds to a narrative environment in which any story seems plausible. The barnyard of corpses and tainted animal studies are examples of ambiguous events that were fashioned together into a larger, ambiguous domestic biological-chemical warfare threat. Within the narrative frame provided by political commentary, however, they were specifically symptoms of a policy problem. Rep. McCarthy gave this problem a shape in March of 1969 when he began asking publically "What is our policy?"[38] That month, the House of Representatives and Senate called for a series of hearing and briefs as part of a debate over a military appropriations bill. At one of the earliest, closed-door briefs to the House, Military officials explained the existence of a vast Soviet biological-chemical warfare capability. While defenders of US biological-chemical weapons research pointed to the Soviet threat as a reason for a US retaliatory capability, detractors claimed that the military was merely using the threat estimates as an attempt to gain more funding to fuel a research program that had already proved more dangerous for Americans than anyone else. The story about the Soviet Threat is actually two stories - the *Post* breaks news of the hearing under the title "Soviet Leads in Chemical Warfare" while the story itself focuses on the politicians who understand the US military-industrial complex as the real threat – a money and power hungry conglomerate unwilling to reveal their activities and, all the while, endangering US citizens. The implication is that the lack of a publically open policy enables the military to conduct all manner of dangerous experiments

[38] Warren Unna, "Soviet Leads in Chemical Warfare," *Washington Post-Times Herald*, March 5, 1969, A3.

(like those at Dugway). Here the biothreat skeptic uses the paranoid attitude to push back against the Army's attempt to leverage their own international paranoia. It is true that military and civilian researchers benefitted from weapons funding (any person benefits from being paid to do their job), the claim here is that the Army is overstating the threat in order to reap these benefits. In calling the Army self-serving, those against bioweapon research simultaneously recognize the possible danger of such weapons, but deny the actual danger presented a foreign stockpile. This demonstrates the way in which skepticism and paranoia as attitudes are not necessarily reductive.

Within this way of seeing, the mere fact of military secrecy was reason for suspicion – even if the military wanted to claim that secrecy was necessary to ensure that the Soviets did not learn about US military operations. As the politicians and scientists told it, the military and the Administration were not just engaged in secrecy for the sake of security, and they could prove otherwise by simply being transparent. As part of his public mission to push aside the veil of secrecy, Rep. McCarthy wrote an open letter to Defense Secretary Melvin Laird that pressed the Administration to reveal the US policies on retaliation as well as the current US chemical-biological and nuclear capability.[39] Weeks later, Senators called for answers to the same questions because, as Senator Gaylord Nelson put it, "[u]nder the cloak of national security there is reason to speculate that some of the most hideous and debasing forms of human warfare are being manufactured at the expense of the unsuspecting tax-payer."[40] Here, Nelson claimed that security was just a shield to hide horrors; the only one protected by the policy of secrecy was the weapon makers within the government and military.

[39] "Hill Probes Biological Warfare," *Washington Post-Times Herald,* March 8, 1969, A2.
[40] "Nelson Asks for Chemical War Probe," *Washington Post-Times Herald,* March 24, 1969, A6.

What seemed (and still seems) hideous and debased about these forms of warfare is the conjunction of two characteristics of biological-chemical weapons: their effectiveness on the battlefield and their risks to those at home. Legislators and activists often reminded the public that the US was one of the few countries who had not already banned the use of such weapons on the battlefield through an act of law. One frequently used justification for eliminating biological-chemical weapons was the 1925 Geneva Protocol, and, among the various demands made of the administration in 1969, was a request by Senator J. William Fulbright that Nixon submit that treaty to the Senate for Ratification.[41] The *Post* connected Fulbright's request with the fact that the US was the "self-proclaimed leader of the civilized world,"[42] and that claim was set in contradistinction to testimony by Matthew Meselson in which he explained that that "an attack by a single bomber, dispensing one of the more deadly nerve gases, could kill most unprotected persons within an area of at least five square miles."[43] Weapons of this type are particularly deadly, and particularly deadly weapons are uncivilized, debased, hideous, etc. Thus, a nation like ours should not pursue them. As a matter of definition and policy, the argument was less clear. Meselson, in citing nerve gas, referred to a weapon that was chemical, not biological. The Geneva Protocol is not, strictly, a Germ Warfare treaty, but a treaty that sought to ban gas and bacteriological weapons. Clear or not, consistent or not, the argument is presented as a relevant part of the paranoid response to the ambiguous and/or secret Administration policies about such weapons.

At the same time, it is not at all clear that the account of germ and gas weapons' devastating power were they to be used was at all separable from the related domestic risk of the

[41] "Germ War Treaty Ratification Sought," *Washington Post-Times Herald,* May 1, 1969, A4.
[42] Fulbright, quoted in "Germ War Treaty."
[43] Meselson, quoted in "Germ War Treaty."

weapons merely existing. That is, in citing the danger of weapons like nerve gas, their physical location was non-trivial. For example, in explaining the need for investigating the US policies and banning 'germ' weapons, the *Post* reported on Rep. McCarthy's repeated claim that there are enough chemical weapons being stored in Utah and Colorado to kill 100 million people.[44] The weapons are dangerous as weapons, but McCarthy explicitly referred to a specific set of weapons stored in a specific location within the US border. McCarthy's story about the danger of gas weapons obviated the need for a bomb – Utah and Colorado as accidents-waiting-to-happen were bombs already, capable of killing their own population many times over. The danger posed by chemical and biological weapons seemed to be of a peculiar character then. Surely one could argue that an arsenal filled with conventional weapons is a reasonably dangerous kind of thing that no one would want in their back yard, but it would seem that the nature of these weapons allows for an invisible, creeping danger of a different sort. It is worth noting, however, that by 1969, the United States had built and was storing many thousands of nuclear missiles on American soil, though sites like Detrick and Dugway Proving Ground were located relatively nearer to civilian living spaces. These biological and chemical arsenals can harm nearby civilians and animals without the accident ever being detected. In one of the many House committee hearings held in which chemical and biological weapons emerged as a subject of interest, military officials presented a map of Utah "with one section marked 'Permanent Bio Contaminated Area,'" extending beyond the borders of Dugway Proving Ground.[45] Though invisible without the aid of the map, the accident-waiting-to-happen was articulated into a

[44] "Rep. McCarthy Urges Ban on 'Germ War' Stockpiles," *Washington Post-Times Herald*, April 22, 1929, A9; George Wilson, "Chemical War Work Faces Probe," *Washington Post-Times Herald*, April 29, 1969, A10; repeated also in Laurence Stern, "Revelations on Chemical Arms Surface at a Crucial Time," *Washington Post-Times Herald*, May 7, 1969, A25.

[45] "Panel is Told Germ Test Area Contaminated," *Washington Post-Times Herald*, May 21, 1969, A3.

permanent fixture of the Utah landscape that extended beyond the military base, out into the rural countryside. The paranoid narrative was entirely vindicated – the Army was guilty of things that even they were unaware of.

At issue in these legislative hearings were two distinctions. First, was there a relevant *moral* difference between chemical-biological weapons and other weapons? Second, was there a relevant *practical* difference between the two in terms of tactics or risks? For some, the two distinctions were related - the arguments of Fulbright and Meselson both implied that taking certain kinds of risks amounted to doing something a civilized nation ought not do. The moral distinction was highlighted in a brief episode that erupted on the campus of Stanford when "300 Stanford students marched to the university president's office…to urge immediate termination of all research into chemical and biological warfare."[46] According to the *LA Times*, the protesting students demanded that new, "morally acceptable" research guidelines be drawn up. The student protest evolved into a sit-in that drews national attention when the students demanded that Stanford end its relationship with the military.[47] The calls by students to end the "inhumane" research were partially answered when the Stanford Board of Trustees voted to stop taking new biological and chemical war contracts, but the sit-in persisted.[48] The *LA Times* story highlighted the positive relationship between the peaceful protesters and the campus police, while the *Post* connected the story to a more general unrest among students against the war in Vietnam by quoting President of Stanford Kenneth Pitzer's brief remarks about Vietnam being a "blunder."[49] The *Post* went on to cite without much detail tenuously related student protests going on at

[46] "300 Stanford Students Protest War Research," *Los Angeles Times*, April 5, 1969, A13.
[47] "Stanford Building Held to Protest War Studies," *Washington Post-Times Herald*, April 11, 1969, A6; "Stanford Lab Seized to Protest Military Work," *Los Angeles Times*, April 11, 1969, A13.
[48] Unnamed Stanford students quoted in "Stanford Building."
[49] "Stanford Building."

Oberlin, Queens College, New York University, and Southern University of New Orleans.[50] In the end, Stanford gave in to the student protests and cut much of the funding it received for secret government weapons projects.

For others, the moral and practical questions were important, but far less interrelated. Speaking before the Senate Armed Services Committee in July of 1969, Air Force General John Ryan was asked if "he had any "natural revulsion" towards the use of biological warfare."[51] Ryan responded to the Committee in the negative, explaining that biological weapons were no different from any other weapon from the perspective of the military: "We're revolted by any casualties…[t]his is one way to impose them."[52] The testimony was part of Ryan's confirmation hearing (and the Committee subsequently confirmed him), so one might reasonably argue that Ryan was speaking in a manner intended specifically to allay public fears about the military. Nonetheless, Ryan's way of talking represented an alternative that seemed to validate the use of biological weapons by denying the military's ability to make the moral distinction and then deferring the judgment to civilians at the Pentagon. Ryan said that he did not see a moral problem with biological weapons, but he did so because he could not see moral problems, not because moral problems could not exist.

Ryan's statements were part of a shift in talking about biological weapons that foreshadowed Nixon's move to ban them. Whether we needed to possess or develop bioweapons became a publically open question. In June of 1969, Nixon made public a government mandate to review the entirety of the Chemical and Biological Weapons program

[50] Only the protest at Oberlin has any relation to the protest at Stanford, as it involved the reinstatement of an Oberlin chapter of the SRI Coalition – the Coalition protesting at Stanford. However, even the Oberlin story is tenuously connected as the SRI Coalition was disbanded because of its protest of the Peace Corps, not military research.

[51] "Air Force Chief Says CBW Just A Weapon," *Washington Post-Times Herald*, July 25, 1969, A18.

[52] "Air Force Chief."

currently in place.[53] The announcement came simultaneously with a letter from the Arms Control and Disarmament Agency sent to Senator McCarthy, thus legitimizing and answering McCarthy's question months earlier about what the Administration's weapon policies were. The announcement of the review also came simultaneously with an announcement of a press conference on nuclear arms talks with the Soviet Union. This marks the beginning of the relocation of the risks of biological weapons and suspicions about them. The 1969 conversation about biological weapons was, as described above, focused on the domestic problem – risks *located* at home and risks *created* at home. The terms of this conversation were partly driven by a narrative in which the US was an international peace keeper, working to de-arm the world through the Strategic Arms Limitation Talks (SALT 1), to finally ratify the 1925 Geneva Protocol, and to help draft the Biological Weapons Convention. This narrative was interrupted, however, by frequent reminders that the US was part of the problem - shipments of Chemical Weapons created new risks at home while accidents abroad and possible atrocities in Southeast Asia embarrassed US military integrity on the global stage. With the Skull Valley sheep kill, the Army's public narratives denied the dangers posed by bioweapon tests – they sought to rebuff the paranoid narratives about biothreats. However, Nixon's solution was different – instead of denying paranoia, he embraced and relocated its object.

[53] Carroll Kilpatrick, "Chemical Warfare Study Set," *Washington Post-Times Herald*, June 18, 1969, A1.

2.2 RELOCATING AND EXPORTING RISKS

As I suggest above, a key feature of these stories about chemical-biological weapon accidents is the conjunction of two related risk narratives: the first is about *location* (there is a risk *here*) and while the second is about *origins* (that risk *came from here*). This distinction is important even as the stories often blur together because each narrative invites a different kind of corrective response. If the risk is *here* but is not tied to *here* through some necessary connection, then perhaps the risk can be moved – relocated to some area in which the risk would be acceptable or unnoticeable. However, if the risk is *here* because it *came from here*, then the solution is less obvious. What about *here* is productive of risk and therefore deserving of our suspicion and anxiety? Are there material conditions *here* from which risk does or will flow? While the former can be solved through movement (re-location), the latter can only be solved through transformation. As it becomes clear that the Nixon Administration is no longer in the business of denying that there is a problem *here*, other locations and their relationships with *here* become important. Below, I draw attention to stories that highlight this turn toward *re-location*.

The narratives of origin and location are intimately tied together because the military justified the presence of risks *here* by claiming that those risks are counter-balanced by risks that originate from elsewhere. As noted above, it was well-known (or at least frequently asserted) that the Soviet Union almost certainly had a terrifying, but secret chemical-biological weapons capability. The possession of biological and chemical weapons, then, stood as a potential in-kind retaliation. This line of reasoning, of course, would eventually motivate the long nuclear standoff of the Cold War. Yet, journalists, politicians, and activists tended to reject this frame for biological and chemical weapons because it was far from clear that such weapons offered any significant tactical advantage. Testing them was dangerous. Storing them was dangerous.

Transporting them was dangerous. Using them with precision was quite difficult. Absent proof that the weapons provided a tactical advantage *or* a practical retaliatory capability, the risks created by testing and storing the weapons *here* seem pointless – even "foolish," as Professor Meselson calls them in his testimony to the Senate Foreign Relations Committee.[54] Even worse, Meselson claims that the possession of biological weapons communicated undesireable messages to the enemy: "a biological warfare threat would say to the other side, in effect, 'All right, we have abandoned all hope, we are going to wipe each other out, let us get started.'"[55] Absent a public policy, absent any public warrants, the military's actions seemed foolish.

By the middle of 1969, the military was under public scrutiny from both within and outside of the Administration. Military bases like Dugway Proving Ground and Fort Detrick had become the locus of risk – sites of contamination, secrecy, and death. In what was interpreted as a response to this scrutiny, the military attempted to move the risk elsewhere by transporting and disposing of large quantities of chemical weapons (primarily nerve gas). The way in which these activities were taken up into the public narrative, however, often created unintended consequences for the military. Stories about the relocations only served to reinforce their view that the chemical-biological weapons program was an example of an accident-waiting-to-happen. For example, in the spring of 1969 it was revealed that the Department of Defense had loaded nerve gas onto 170 freight cars in Colorado with the intention to take them to the East Coast, load them on ships, and dump them in the Atlantic Ocean.[56] Members of the Senate Foreign Relations Committee as well as Rep. McCarthy publically criticized the lack of security and

[54] Ted Sell, "Germ, Chemical Arms Foolish, Biologist Says," *Los Angeles Times*, June 23, 1969, A6. Reprinted as "Chemical Arms Called Foolish," *Washington Post-Times Herald*, June 23, 1969, A18.
[55] Meselson, quoted in "Germ, Chemical Arms Foolish."
[56] Warren Unna and Jean M. White, "Plan to Dump Gas is Defended," *Washington Post-Times Herald*, May 22, 1969, A3.

integrity in the shipment process and the Department of Transportation put the shipment on hold while the matter was investigated.[57] As a result, the train cars filled with nerve gas simply sat waiting while the Army was charged $8500/day in rent by the railcar owners.[58] The plan to dump the weapons in the ocean – one mission in a several decade-long program called CHASE (Cut Holes And Sink 'Em) – was defended in the *Post* by Barry Shillito, Assistant Defense Secretary for Installations and Logistics with the simple logic that dumping "was the fastest and cheapest method of disposal"[59] by millions of dollars. While Shillito's admirably seeks to save the taxpayers money, his priorities seem tone-deaf insofar as the high cost of biological weapons was only a secondary problem within the narrative. The problem, as stated in the news, was that it was disturbing for the US to spend so much to *build weapons so dangerous*. As portrayed in the story, Shillito's logic seems bizarre. The military had been asking for an increasing amount of money to create the dangerous weapons, but then becomes interested in financial waste when complaints about safety arise. Sense can be made of Shillito's point of view (he is a logistics officer), but the *Post* story clearly makes him out to be missing the point.

In their attempt to eliminate stockpiles through CHASE the military worked to move the site of the risk. However, within the context of the twin narratives of location, two unintended consequences emerged. First, as Rep. McCarthy argued, now the risk is on the move; the accident-waiting-to-happen is coming to a city near you.[60] If the weapons were a risk when hidden away in a military base, their risk status was magnified as they hurtle across the country. If the military cannot be trusted to keep the contamination of Dugway within its walls, a railcar is surely inadequate. The problem with re-locating risks is that they must pass between point A

[57] "Plan to Dump Gas."; "Panel is Told."; earlier in "McCarthy Urges Ban."
[58] "Plan to Dump."
[59] "Plan to Dump."
[60] "McCarthy Urges Ban."

and B. In the case of CHASE, the risk must pass through the homeland before it can leave the homeland. Because the public cannot see biological or chemical weapons until after an accident, moving weapons across America, under the public eye will only make matters worse. The railcars, stopped by transport officials, became a spectacle that made visible the weapons risky nature. Even if CHASE had been a successful relocation, the second narrative remained unanswered – CHASE did not necessarily move the origin of the risk. As long as the United States was the sort of place in which gas weapons are made, the arguments made by McCarthy, Meselson, and others had force. Further, moving surplus products from a weapons factory only demonstrated how effective the Army was as a risk producer. Even assuming the public believed the military was acting in good faith, the fact would remain that the military seemed committed to building and testing weapons. By reducing their stockpiles the Army confirmed the paranoid narratives by effectively admitting to the presence of dangerous weapons. Relocating the weapons did not relocate the risk – instead it spread the risk out and made it more visible. It did not move the object of paranoia so much as enlarged it.

That the military seemed confused about the relationship between risk and place was lampooned by Art Buchwald in a story published in the *Post* and picked up later by the *Times* about 'Moon Germs.'[61] As the *Times* put it, "Sometimes one gets the feeling that the right-hand germs in the government don't know what the left-hand germs are doing."[62] In Buchwald's story he related a satirical story about his "friend" Professor Heinrich Applebaum (a fictional strawman that Buchwald used frequently to lampoon out-of-touch experts) in order to understand why NASA was spending so much money in order to ensure that their mission to the moon

[61] Art Buchwald, "NASA vs. Defense: Germs on Earth are O.K. If They're Army Issue," *Washington Post-Times Herald*, July 20, 1969, A41. Reprinted as "Put it This Way: Never the Germs Shall Meet," *Los Angeles Times*, July 22, 1969, A7.

[62] Buchwald, "NASA vs. Defense."

would not accidentally bring "moon germs" back to Earth even as the Army was spending an equally large sum to test nerve and germ weapons within the borders of the United States. Their dialogue came to a head as Buchwald asked Applebaum, "But how can the same people on one hand spend all this money to see that no germs come back from the moon, and on the other spend money to figure out ways of spreading germs around the world?"[63] In explaining the government's apparently schizophrenic view of germ risk, Buchwald layered absurdity after absurdity. Since the mission to the moon was in the name of peace, surely it would be inexcusable to contaminate the Earth in the course of carrying it out. Germ experimentation, however, was a Defense Department operation and "everyone understands that we are only defending ourselves from the other side."[64] By this logic, the acceptability of putting a given location at risk of contamination was traceable to an institutional motive, but not all motives are made equal. When Buchwald suggests that they test germs weapons on the moon instead of on Earth, Applebaum retorts that contaminating the moon would be inexcusable – because the government may need to test germ weapons in a germless environment at some later date. By this paranoid logic, the chemical-biological weapons program saw locations only as to-be-contaminated. Clean spaces were worth protecting only insofar as we might need such a space for controlled testing.

Three days after Buchwald's satire saw press, the *Post* reported on a real example of the US exportation of risk in a front-page story by George Wilson titled "Nerve Gas Kept on Okinawa Will Be Withdrawn."[65] As the story explained, several soldiers and one civilian were exposed to a chemical agent called GB – a nerve gas now more commonly referred to as Sarin.

[63] *Ibid.*
[64] *Ibid.*
[65] George C. Wilson, "Nerve Gas Kept on Okinawa Will Be Withdrawn," *Washington Post-Times Herald*, July 23, 1969, A1.

The exposure occurred while removing paint from a "weapon" during "a standard maintenance procedure."[66] In explaining the accident, Daniel Z. Henkin, Assistant Secretary of Defense for Public Affairs, downplayed the danger of GB: "In high dosage rates, it can be non-lethal with prompt and proper medication."[67] Wilson went on to cite an "Air Force technical document written by the Mitre Corporation" that described both the symptoms and high toxicity of GB (the median lethal does is 1.7 grams) as well as the strategic use of the weapon to carry out "mass incapacitation" without "mass killing."[68] Because of the attack, the nerve gas would be removed from Okinawa, but Wilson claims that the "carefully worded" statement left open both the timeline for the move as well as the ultimate destination of the GB gas. There was, of course, no good answer to either of those questions. The Department of Defense was already simultaneously under scrutiny for holding chemical weapons on US soil as well as transporting chemical weapons for a disposal-at-sea. There was no simple rhetorical (much less material) solution to this problem. As the train cars already demonstrated, moving an accident-waiting-to-happen only created a moving-accident-waiting-to-happen. They must be re-moved even as moving them will be unacceptable – they were an unjustified risk regardless of their location.

The uncomfortable need to relocate the weapons in places like Okinawa and Colorado marked a major triumph for the paranoid attitude. Whether or not the Army killed the sheep in Skull Valley or the cows near Detrick, the sum of their actions served to confirm that there can be no meaningful way to deny that the military was engaged in risky behavior. In what follows, I describe how the arguments in favor of possessing biological and chemical weapons dissolve

[66] *Ibid.*
[67] Henkin, quoted in Wilson "Nerve Gas."
[68] *Ibid.*

even further. The public debate about whether or not risks existed was over; next begun a debate over which risks (if any) were worth taking and what arguments for those risks were plausible.

2.2.1 An International Ban, But on What?

While most of the stories in the US press located the risk of chemical and biological weapons in terms of US borders, the latter half of 1969 brought a new wave of stories that widened the scope of the risk location to the world. However, in widening the scope, these stories actually served to reinforce the problem of domestic risks, especially by undermining military arguments about the value of possessing biological and chemical weapons. In the first week of July, the United Nations issued a report on chemical and biological weapons. On July 3rd, both the *Washington Post* and the *Los Angeles Times* reported on the study.[69] Both articles opened by explaining the reports apparent conclusion: "There is no certain defense for any nation against biological and chemical weapons of war."[70] Said differently, "[c]hemical and biological weapons would endanger the attacker as much as the intended victim."[71] In the *Post*'s article, the headline after the jump stated bluntly: "U.N. Finds Germ War Suicidal." In his preface to the report, U Thant, then-Secretary General, called on "all nations to bind themselves legally never to use chemical and biological weapons."[72] Thus, the report maintained the same danger-to-the-user narrative found in the domestic stories about weapons testing accidents but extended that logic into the battlefield. Just as the weapons may have unintended domestic consequences for the users, their presence and use as part of a military arsenal seemed capable of creating an

[69] Robert H. Estabrook, "No Defense In Germ War, U.N. Reports," *Washington Post-Times Herald*, July 3, 1969, A1; Earl W. Foell, "No Defense Seen in Biochemical Warfare," *Los Angeles Times*, July 3, 1969, A11.
[70] Foell, "No Defense."
[71] Estabrook, "No Defense."
[72] Foell, "No Defense."

unpredictable pattern of escalation. The *Post*, quoted the report at length: "Chemical and bacteriological (biological) warfare could open the door to hostilities which could become less controlled, and less controllable, than any war in the past."[73] The report offered a view in which:

> …lethal, unpredictable weapons which could damage their users as much as their victims, harm civilians more than soldiers, upset the environment widely and for long periods, be formidable expense even for a great power to defend against, be almost certain to cause escalation whenever used – and spread dangerously to the hands of irresponsible leaders of small nations.[74]

In this story of escalations, small nations might become attracted to chemical and biological weapons (CBW) because they are both less expensive and less complex than nuclear arms. Thus:

> A state having an adequate chemical or pharmaceutical industry could, by concentrating on producing just one CBW system, become a lethal threat to its neighbors… [and] would also create a boomerang threat for its own citizens because of the unpredictability of the weapon and the impossibility of adequate defense.[75]

CBW, then, breeds more CBW; risks expand across borders, toward enemies and allies, and can do it for a budgetary bargain. Now, the accident-waiting-to-happen invites its duplication and has as its logical conclusion a snowball of accidents which, in their unpredictability, spread like an infection across borders. The conclusion of this story is a world populated by accidents-waiting-to-happen, followed immediately by some combination of victims of attacks and accidents.

While the UN report was understood to be nothing less than a call for "a comprehensive halt in development, production, and stockpiling and such weapons,"[76] a comprehensive solution

[73] Estabrook, "No Defense."
[74] Foell, "No Defense."
[75] *Ibid.*
[76] Estabrook, "No Defense."

seemed immediately problematic because of the unresolved ambiguity between the two halves of so-called CBW. While the domestic stories above talked about a thing called Chemical-Biological Warfare, the report very clearly marked out a difference between Bacteriological (aka Biological) Weapons and Chemical Weapons. Recall that, above, stories about Dugway Proving Ground sometimes conflated the presence of toxic gas (GB, VX, Sarin) with the long-term contamination caused by anthrax spores in and around the base, but in other cases the two types of weapons are treated as distinct.[77] Thus, the division was not new, but it had not been emphasized by journalists until after the UN Report, as both scientists and politicians began to more carefully characterize what could and should be banned.

One possible limitation on the success of a comprehensive ban was the differing ease with which regulators could eliminate the raw materials used for making these weapons from laboratories, bases, and commercial markets. Dr. Ivan Bennett, the American member of the UN committee who drafted the report, explained in an interview quoted by the *Times* said that "in practical terms, the line between chemical and biological weapons [is] extremely important" in conversations about banning and disarmament.[78] For Bennett, the distinction was relevant because he thought that "there is no legitimate civilian reason for producing most of the bacteriological warfare agents. But on the chemical side it is hard to sort out civilian production from potential war production."[79] Thus, for Bennett, there was a problem of sheer feasibility – it may not be that we could comprehensively ban chemical agents because the relevant chemicals had common, peaceful uses. Bennett's brief comments foreshadow two important questions.

[77] *Washington Pos*t ambiguously combines talk of "biological contamination" with "nerve gas" in "Panel is Told Germ Test Area Contaminated" (discussed above) while *Los Angeles Times* makes clearer distinctions in "Permanent Danger Seen in Test Area," *Los Angeles Times*, May 28, 1969, A5. The distinction seems at least probably known to journalists, but stories like these often switch back and forth between chemical-talk and biological-talk.

[78] Foell, "No Defense."

[79] Bennett quoted in Foel, "No Defense."

First, what were the relevant distinctions within the field of CBW? Second, what might count as a legitimate reason for possessing a given substance within one of the resulting classes?

Another narrative that drove the relevance of the split of CBW was the swift response of the British to the UN's call for disarmament. On the same day that the UN delivered its report, the *Post* paired the "No Defense" article with a shorter piece: "Britain May Propose Germ-War Treaty."[80] "Reliable sources" told the press that the British planned to draft a treaty which dealt specifically with germ weapons.[81] Though the British proposal was not yet concrete, the *Post* claimed that "The Soviet Union has already rejected the British proposal and has said the 1925 Geneva Protocol banning chemical and bacteriological weapons is adequate."[82] Here, we see the first of many stories centering on the Soviet Union, their possible Chemical-Biological capability, and their position on disarmament.

While the drama of biological weapons on the international stage is easily seen in retrospect as yet another Cold War struggle between the US and the Soviet Union, it was not necessarily one in which the Soviets are always portrayed as the 'evil empire.' A story published in the last week of July 1969 explained in more detail why the Soviets stand against the British treaty: in their view it would "[postpone] "indefinitely" the problem of prohibiting chemical weapons which…posed a "more real" threat."[83] Further, "the question arises whether the prohibition of biological weapons alone will not accelerate the chemical arms race" and the possible "weakening and undermining" of the Geneva Protocol.[84] Importantly, the US representative at the disarmament talks expressed reluctance about whether it "would be

[80] "Britain May Propose Germ-War Treaty," *Washington Post-Times Herald*, July 3, 1969, A12.
[81] *Ibid.*
[82] *Ibid.*
[83] Soviet UN delegate Alexei A Roshchin, quoted in "Soviets, Poles Oppose Draft Germ Treaty," *Washington Post-Times Herald*, July 23, 1969, A10.
[84] Roshchin quoted in "Soviets, Poles."

desirable to conclude a separate measure relating only to biological weapons."[85] Thus, the Soviet Union was not the only nation skeptical of the British's plan. Still, the US's protest seems hollow given the fact that it had yet to even ratify the 1925 Protocol. The Soviet Union had in 1928. The small, apparent agreement between the Soviet Union and the US on this matter did not clearly demonstrate anything, and the article makes no attempt to interpret the points of agreement and disagreement. Though the press did not know it at the time, the Nixon Administration was privately limiting treaty actions while it sought to craft a new comprehensive domestic policy (see below). Nixon had not yet answered McCarthy's earlier question – the State Department did not know the US's biological weapons policy because it was not clear that the US had one. In the summer of 1969 all that seemed clear was that a joint Chemical-Biological treaty between the US and the Soviet Union was just out of reach. Until the US knew what its own policy was, it could not negotiate.

The difficulty in interpreting the relationship between the United States and the Soviet Union's various capabilities and motives was highlighted further in the *Post*'s "Russian Capability for Chemical, Biological War."[86] Clearly, the Soviet position on CBW was important because "[d]efenders of American preparations for chemical and biological warfare often cite as a rationale the Soviet Union's CBW programs."[87] But, far from the front page, this story about Soviet weapons was measured and quite complex. The author, former Russian Bureau chief Stephen Rosenfield, suggested that, in the final analysis, the United States really did not know much about the Soviet weapons capability beyond what can be more easily verified about the

[85] James F. Leonard, quoted in "Soviets, Poles."
[86] Stephen S. Rosenfield, "Russian Capability for Chemical, Biological War," *Washington Post-Times Herald*, July 19, 1969, A22; reprinted with different paragraphing and subtitles as "Russians want Tight Lock on Doors to Gas Warfare," *Los Angeles Times*, July 27, 1969, E3.
[87] *Ibid.*

state of Soviet biomedical science, but even that evidence is not clearly a good foundation from which to draw conclusions.[88] On the one hand, "one qualified source" claimed that some Soviet scientists "have shown the expertise and "feel" consistent with CW work."[89] Further (perhaps as an example), the story noted that "Years ago the Russians developed a "superb" vaccine for tularemia." On the face of it, this demonstrated the excellence of Soviet medical science, but the story was quick to point out that we may misunderstand the Soviet's objectives since "[tularemia] is at once a public health problem in the Soviet Union and a BW enterprise in the United States."[90] This ambiguity in the use of biomedical technology is an example of the difficulty in Dr. Ivan Bennett's suggested, pragmatic distinction between Chemical and Biological weapons – Biological "weapons" research was not easily separable from "legitimate" civilian work anymore than chemical weapons are easily separable from civilian applications of weapon precursors. In sum, though the military clearly hoped to implicate the Soviets as the obvious threat – that is, the *real* location of danger was in Eastern Europe – there was not sufficient material evidence to make such a case. Dugway Proving Ground remained more obviously dangerous than the Soviet Union so long as we knew more about domestic accidents than we knew about international threats. Note, however, how arbitrary such an attribution of danger is given how 'obviously dangerous' US military bases seemed even in the absence of detail about their research programs. At that point in 1969, the public stories about bioweapons portrayed the US military as *more suspicious* than the Soviets. After Nixon's policy shift, suspicious shifts as well.

[88] National Security Council meeting minutes that I cite below would seem to support this interpretation.
[89] *Ibid.*
[90] *Ibid.*

It might seem dissonant to be so critical and suspicious of the US while being so charitable toward the Soviet Union in the middle of the Cold War, yet this narrative dominates the news cycle leading up to Nixon's renouncement. This shows how a paranoid dialogue can emerge – a dialogue in which attitudes are shared, but the objects of those attitudes remain in contest. Strange events happened and the military became the object of suspicion. Once that suspicion is confirmed, the US military attempts to point toward a more suspicious object (the Soviets). Critics of the military, in turn, make their own paranoid move and draw attention to the military's paranoid appeal by calling it self-serving. Since the military's transparency is already highly questionable, they remain easy targets for paranoia (recall above when military officials admitted as much). Paranoia can be directed toward anything, but taking a single paranoid stance need not require taking a totally paranoid stance. In this case, critics might have even been pushed into a charitable view of the Soviets simply in light of the fact that the US military was suspicious of them. Seen this way, the debate over biological and chemical weapons is a struggle for the authority to name the appropriate object of suspicion. Since the military is already an object of suspicion, it is incapable of winning that struggle.

Whether the bioweapon critics took a charitable position toward the Soviets for authentic or pragmatic reasons, part of the narrative success of the critics seems to rely on not just a charitable view of the Soviets, but a strong identification with them. Rosenfield, in the story discussed above, reported that "American scientists in a position to know have found their Soviet colleagues as passionately opposed to CBW as themselves."[91] Further, the most difficult part of the arms negotiations – a method for inspection and verification of a ban – might have been

[91] *Ibid.*

solved by a system of mutual inspection that the Soviet scientists seem to approve of. Thus, Rosenfield concluded that the "Russians are prepared to conduct CW, probably BW too, but they never have done it and presumably they are extremely reluctant to, even in retaliation."[92] Rosenfield said that if we looked for Soviet aggression on the CBW front, we had to go back to WWII to find it. Instead, it was the United States who was in the wrong, having never ratified the Geneva Protocol and having already used non-lethal chemical weapons (herbicides and tear gas) in Vietnam.

Nevertheless, Rosenfield's narrative does not entirely exculpate the Soviets – his identification with them is incomplete. When asked about the Soviet capability or even the tactical potential of chemical weapons, Rosenfield answered that Soviet experts made soft denials. He recounted an anecdote from a 1968 symposium in Stockholm in which a Soviet expert was asked to speculate about whether or not "CW was usable in mobile as well as static warfare, he said he had to say he was "a dilettante in such matters."[93] This "posture," Rosenfield said, left Americans feeling like the Soviet Union was intentionally not rebutting their as-of-yet-unused capability. Thus, the problem with trying to ascertain the Soviet capability was a distinction between *production* and *use*. Even if the Soviet scientists were reluctant to *use* chemical and biological weapons, it was not clear that they were reluctant to *produce* them. As the UN Report suggested, using chemical and biological weapons is dangerous, but much of the problem flows from their mere existence. If any nations possess chemical and biological weapons, then there immediately exists likelihood of an arms race or a series of inadvertent disasters. This distinction between use and production shows some of the problems that flowed from the claim that scientists are unilaterally against CBW. The difficult truth is that large

[92] *Ibid.*
[93] *Ibid.*

numbers of civilian and military scientists in the US and the Soviet Union pioneered the chemical and biological weapons units in those countries, though these scientists remained somewhat silent during the debate over whether or not the US should continue its biological weapons program. Such scientists don't fit neatly into any given category and their perspective remains largely untold. In chapter 5 I discuss the possible value that reconstructing that perspective might have for understanding the bioweapon drama further.

In a different telling of the British draft, *LA Times* writer Earl Foell repeated the conclusions of the UN Report and the British's attempts to "split the Siamese twins" of germ and chemical warfare, but claimed that "International Specialists [in Geneva] generally applaud the proposed divorce."[94] The applause was pragmatic, but not for reasons similar to Bennett's. Instead, biological weapons could be more easily banned because "military planners of all the major powers have much less vested interest in biological weapons of mass destruction than they do in chemical weapons."[95] Thus, biological weapons should be banned before such interest could grow. In Foell's story, the British draft was a remarkable, needle-threading operation that avoided the problems that had already "plagued" nuclear disarmament talks. Namely, the British draft conferred to the UN "broad powers to investigate complaints of nations claiming they have been attacked with microbe weapons."[96] Further, the British treaty would have strengthened the 1925 Geneva Protocol by extending the ban on biological weapons to all forms of use, making it a de facto ban on stockpiling. Thus, the treaty could avoid the problem of possession without use.

[94] Earl W. Foell, "British to Make Germ War 1st 'CBW' Target," *Los Angeles Times*, July 13, 1969, F6.
[95] *Ibid.*
[96] *Ibid.*

Foell's telling of the British draft and the international response was in some ways quite different from Rosenfield's, especially in not mentioning possible American reservations to the treaty. Instead, Foell explained that "Moscow, and to some extent the other great powers, are distrustful of such power in the hands of the U.N. leader."[97] Thus, the Soviet Union was worried about the treaty because of where it located power, not because of the division between the biological and the chemical. In the end, this story plays into Rosenfield's caricature of Russia as providing a troublesome posture that allowed its enemies to suspect that it has something to hide.

These twin retellings of the UN Disarmament Conference demonstrate the flexibility available in the negotiation over the division between biological and chemical weapons. Should they be divided? What would count as a good reason for dividing them? How should we understand those who want to stand against their division? Military arguments about the location of risk attempted to direct attention outward – toward enemy states like the Soviet Union. In the final days of July, 1969, Secretary of Defense Melvin Laird repeated this story, during a Q&A session with summer interns:

> "As much as we deplore this kind of weapon, it serves as a deterrent to see that these gases are never used in our time," he told a group of students. Laird said the United States would never be the first to launch a CBW attack but would retaliate in kind "if any nation should be so foolish" as to use chemicals or germs against this country.[98]

Here, Laird's characterization of the US investment fell neatly into the U.N.'s prediction about a world in which chemical and biological weapons existed. In the context of the July stories about CBW, Laird seemed tone deaf to the narratives dominating the news. The story's subtitle – "Soviet Stockpile Much Larger, Secretary Declares, but Declines to Give Figures" – rearticulated the "foolish" strategy described by Matthew Meselson as well as the fuzzy deduction described

[97] *Ibid.*
[98] "U.S. Chemical Arms a Deterrent, Laird Says," *Los Angeles Times*, July 29, 1969, A4.

by Rosenfield. Even if the weapons could be used as a deterrent, it remained unclear that they served to reduce domestic risk in doing so.

Even with Laird attempting to speak well for the Administration, the general public sentiment against the US military seems to drown him out. The stories about suspicious domestic military accidents combined with the continually increasing anti-war sentiment paint a hawkish, unflattering picture of the US war effort writ large.[99] However, it is hard to see what else the Administration could have said that would responded to the stories about domestic accidents and the terrible potentials described by the U.N. Report. At Dugway, the military somewhat pathetically claimed that there was no proof that the sheep died from a nerve gas testing, but they were forced to admit that they had contaminated the area with anthrax. On the international stage, the administration declared that they needed a deterrent against an enemy that they could not characterize and that the deterrent would be made up of weapons which they would rather not discuss publically.

Laird was, it turns out, well aware of this difficult position. As the story about Laird notes, there was a National Security review of CBW programs underway in the Nixon Administration – and Laird was the one who requested it.[100] In this review, the Administration found the inventional resources to respond to its difficult situation. Their response sought to clarify the distinction between chemical and biological weapons as well as make plain what counts as "legitimate" possession of each. Below, I turn back to the Spring of 1969 in order to read a series of Memos in which Secretary Laird and National Security Advisor Henry Kissinger negotiate and put into motion the CBW review and, finally, create a new way of talking about

[99] Hazel Erskine, "The Polls: Is War a Mistake," *The Public Opinion Quarterly* 34, no. 1 (1970): 134-150.
[100] "U.S. Chemical Arms."

the US programs into both. Afterward, I return to stories in the *Washington Post* and the *LA Times* leading up to Nixon's policy shift.

2.2.2 The National Security Council Review & The Way Forward

As detailed above, Rep. McCarthy began a series of open attacks on the Nixon Administration's policy on chemical and biological weapons. In March, specifically, he asked "What is our [CBW] policy?" during a press conference and, afterward, the press was alerted that McCarthy had written a letter to Secretary of Defense Melvin Laird to demand answers to his questions. The press followed McCarthy's political theatre closely and reported on the subsequent House and Senate hearings in which, as I explain above, the Administration appears increasingly unable to justify the domestic risks created by the US CBW program. In June of 1969, a shadow of the Administration's eventual response emerges on the front page of the *Washington Post*: "Nixon has ordered a full-scale review of all aspects of the Nation's much criticized biological warfare program."[101] The announcement of the review was made, in part, through a letter from Gerard Smith, the director of the Arms Control and Disarmament Agency[102] to none other than Rep. McCarthy. According to the letter, the review was being conducted in response to the "concern" about the CBW program and would involve a detailed review that included a reconsideration of the 1925 Geneva Protocol.[103] McCarthy, in response,

[101] Carroll Kilpatrick, "Chemical Warfare Study Set," *Washington Post-Times Herald*, June 18, 1969, A1.

[102] The Arms Control and Disarmament Agency (ACDA) was an independent government agency created in 1961 when President John F Kennedy signed into law the Arms Control and Disarmament Act. Its mission, as described by the original bill (HR 9118) was "formulating, advocating, negotiating, implementing and verifying effective arms control, nonproliferation, and disarmament policies, strategies, and agreements." It was integrated into the State Department in 1997 by President Bill Clinton and reorganized in 2005 after a review by Secretary of State Condoleeza Rice.

[103] Kilpatrick, "Chemical Warfare Study."

called for a temporary ban of CBW tests, but the White House Press Secretary, Ronald Ziegler, said that any ban would come only after the National Security review.

The review brought instant, but brief positive press for the Administration. Later in June a shorter piece in the *Post* characterized the President's actions as properly responsive to the public's concerns over CBW.[104] The article, like many others described above, heralded McCarthy as a hard-working political hero who, driven by personal concern, called on the President to curb the dangerous work being carried out by the Army both on US soil and in Vietnam. And, because of his response, President Nixon momentarily found himself on the right side of the issue.

The details of the review, however, were secret (literally Top Secret) and coverage of it largely vanished in the national press, though Secretary Laird frequently brought the existence of the review into conversation when interviewed. When questioned about the Okinawa accident, Laird stood firm on current US policy and reminds the press that the policies are under review.[105] When questioned about the British draft treaty, Laird does the same.[106] In internal memos and private conversations, Laird pushed hard for the review and the subsequent draw down of biological and chemical weapons, but in public Laird toed the unpersuasive Administration position that a review was underway and nothing more could be said. In a series of memos that began in April of 1969, Laird showed an attention not only to CBW policy, but to messaging and the rhetorical problem facing the Administration as a result of the US CBW program. Laird's attention to terms gives great insight into how the Nixon policy shift was meant to operate rhetorically.

[104] "Hard Look at Gas Warfare is Overdue," *Washington Post-Times Herald*, June 24, 1969, A11.
[105] Laird quoted in Wilson, "Nerve Gas."
[106] "U.S. Chemical Arms."

2.3 THE INTERNAL DRAMA[107]

In April of 1969, after public calls from both the House and Senate for answers on matters of CBW policy, Secretary Laird sent a memo to Henry Kissinger (then Assistant for National Security Affairs) expressing that he was:

> …increasingly concerned about the structure of our chemical and biological warfare programs, our national policy relating to such programs, and our public posture vis a vis chemical and biological warfare activities. It is clear the Administration is going to be under increasing fire as a result of numerous inquiries, the more notable being Congressman McCarthy's and Senator Fulbright's.[108]

Laird's concern was, importantly, not obviously with CBW per se, but with how the Administration talked about its research into CBW. McCarthy and Fulbright wanted answers and the Administration did not seem to have good ones. In the memo, Laird suggested a review by the National Security Council.

Laird's suggestion seemed to gain quick traction within the Administration and spurred an internal discussion that highlighted the need for a swift solution to a problem that has arisen out of ambiguity and confusion. A week after sending it, Morton Halperin (one of Kissinger's staff) sent a memo to brief Kissinger on Laird's memo.[109] Halperin highlighted the urgency of

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[107] Memos and reports in this section are digitally archived in two locations. Most are archived by the Department of State's Office of the Historian and can be found in the Foreign Relations Archive, 1969-1976. Many exist in redacted copies by way of the Freedom of Information Act, but fully redacted versions were declassified in 2003 and are available for view and download at http://history.state.gov/. The Office of the Historian provides sources for the physical location of any digitized document. Most other cited documents can be found at the digital archive of National Security Archive Electronic Briefing Book No. 58, Volume III: Biowar which is maintained by George Washington University at http://www2.gwu.edu/~nsarchiv. Many documents appear on both archives. I attempt to cite the least redacted version available.

[108] Memorandum From Secretary of Defense Laird to the President's Assistant for National Security Affairs (Kissinger), Washington, April 30, 1969, Foreign Relations Archive, 1969-1976, US Department of State Office of the Historian, accessed November 30, 2014, http://history.state.gov/.

[109] Memorandum, Morton H. Halperin To National Security Advisor Henry Kissinger, Subject: Memorandum to Secretary Laird on CBW Study, May 7, 1969, National Security Archive Electronic Briefing Book No. 58, Volume III: Biowar, George Washington University, accessed November 30, 2014, http://www2.gwu.edu/~nsarchiv.

Laird's request and drafted a suggested memo for Kissinger to sign that affirms Laird's concern. On May 9th (two days later) Kissinger sent that memo to Laird[110] and on May 23rd Kissinger sent a memo to the President proposing a National Security Study Memorandum (NSSM), emphasizing, as Halperin did, the urgency in Laird's request. The proposed NSSM begun:

> a basic study of U.S. policy, programs and operational concepts relating to chemical and biological warfare and agents. The study requests a comprehensive review of present U.S. positions, including analysis of the main issues confronting U.S. policy in this field, and of possible alternative approaches thereto…
>
> …In the light of the uncertainty surrounding U.S. policy and programs in this area, and in light of the increasing public concern and attention being given the subject, I believe that an overall study of present policy and possible alternatives is required.[111]

Kissinger cited "uncertainty" and hopes the study will uncover "possible alternatives." In an echo to McCarthy, Kissinger too wanted to know 'what is our policy?'

By May 28th, President Nixon gave Kissinger the approval to send out National Security Study Memorandum 59: "U. S. Policy on Chemical and Biological Warfare and Agents"[112] to the Secretaries of Defense and State, the Directors of the CIA and the ACDA (Gerard Smith), as well as the President's Science and Technology Advisor (Lee DuBridge). The memo mandated an extensive study:

> The study should examine present U.S. policy and programs on CBW, the main issues confronting that policy, and the range of possible alternatives thereto. The analysis should delineate (1) the nature of the threat to the U.S. and its Allies and possible alternative approaches in meeting this threat; (2) the utility of and circumstances for possible employment of chemical and biological agents, both lethal and incapacitating; (3) the operational concepts relating to possible use, testing and stockpiling; (4) the research and development objectives; (5) the nature of and alternative approaches to the distinction

[110] Memorandum, National Security Advisor Henry Kissinger to Secretary of Defense Laird, Subject: CBW Study, May 9, 1969, National Security Archive Electronic Briefing Book No. 58, Volume III: Biowar, George Washington University, accessed November 30, 2014, http://www2.gwu.edu/~nsarchiv.

[111] Memorandum From the President's Assistant for National Security Affairs (Kissinger) to President Nixon, Washington, May 23, 1969, Foreign Relations Archive, 1969-1976, US Department of State Office of the Historian, accessed November 30, 2014, http://history.state.gov/.

[112] National Security Study Memorandum 59, May 28, Washington, 1969, Foreign Relations Archive, 1969-1976, US Department of State Office of the Historian, accessed November 30, 2014, http://history.state.gov/.

> between lethal and non-lethal chemical and biological agents, including a review of current applications of U.S. policy relating to non-lethal agents such as chemical riot control agents and chemical defoliants; and (6) the U.S. position on arms control, including the question of the ratification of the Geneva Protocol of 1925.

Everything, it would seem, was on the table for review. As Kissinger's memo described it, the study aimed to reassess entirely the (presumably international) threat of CBW and how the US can adequately meet that threat. Further, it seemed not to assume that the current terminological distinctions may hold and asked for a review of the "nature and alternative approaches" to the dual distinctions of lethal/non-lethal and chemical/biological, the intersection of which might mark off the chemical arms being actively used in Vietnam.

While Kissinger's memo emphasized the nature of threats over the terms used to describe them, it was terms that preoccupied Secretary Laird and his "structural" concerns with the CBW program. In a staff meeting later that Fall, on the heels of many military officials testifying on Capitol Hill on CBW issues, Laird expressed his view that the term CBW had outlived its usefulness and the term wrongly "lumped together" the programs.[113] Laird expressed in this meeting an opinion which will later become law – that we should refer to two programs "one for chemical warfare and one for biological research."[114] It was the term "CBW" that put the Administration at a disadvantage in the public debate. During the meeting a disagreement emerged between Dr. Ivan Selin (one of Laird's staffers) and the Thaddeus Beal (Undersecretary of the Army) about the existence of a "biological warfare program" in the United States. Selin suggested that no such thing existed, while Beal cautioned that the Army was indeed creating biological warfare agents, just not munitions. The group also debated the merits of the term

[113] Minutes of the Secretary of Defense's Staff Meeting, Washington, August 4, 1969, Foreign Relations Archive, 1969-1976, US Department of State Office of the Historian, accessed November 30, 2014, http://history.state.gov/.

[114] *Ibid.*

"chemical ordnance" versus "chemical warfare" – Laird disliked the latter as it over-emphasized offensive concerns whereas he wanted the Administration's terms to emphasize defensive aspects while leaving open the possibility for offense.[115]

The brief debate hinted at by the minutes of Laird's meetings demonstrated the need for a way of talking about the programs that were currently bound up under the term CBW that could get the Administration out of the 'defensive' position in the public debate. The best way out, as Laird saw it, was a re-articulation of warfare research as defensive research: research that allowed for limited ordnance creation without calling it ordnance; a non-warfare program that developed warfare agents. Perhaps to that end, soon after the staff meeting Laird wrote his Assistant Secretary G. Warren Nutter to ensure that he (Laird) would be kept in the loop while all Department of Defense reports pursuant to the NSSM were in "working paper" status.[116] Laird wanted to maintain as much control on the terms and their definitions as possible.

A CIA Intelligence report circulated later that month as well as a memo from Halperin to Kissinger seem to hit upon these same terminological difficulties.[117] The CIA report, in summarizing the history of international arms treaties, described the difficulty in interpreting what the 1925 Geneva Protocol actually bans. The report suggested that clearly chemical gasses which kill and permanently disable were banned as were any weapons which are bacteriological in nature. Less clear, however, was the status of so-called "harassing" and "incapacitating"

[115] *Ibid.*

[116] Memorandum From Secretary of Defense Laird to the Assistant Secretary of Defense for International Security Affairs (Nutter), Washington, August 6, 1969, Foreign Relations Archive, 1969-1976, US Department of State Office of the Historian, accessed November 30, 2014, http://history.state.gov/.

[117] Intelligence Report Prepared by Directorate of Intelligence, Central Intelligence Agency, Washington, August 18, 1969, Foreign Relations Archive, 1969-1976, US Department of State Office of the Historian, accessed November 30, 2014, http://history.state.gov/; Memorandum From Morton Halperin of the National Security Council Staff to the President's Assistant for National Security Affairs (Kissinger), Washington, August 28, 1969, Foreign Relations Archive, 1969-1976, US Department of State Office of the Historian, accessed November 30, 2014, http://history.state.gov/.

weapons.[118] These sorts of weapons are exactly those at issue in the Vietnam War. The larger problem was, however, that most "harassing" agents are "harassing" up to some dosage point, after which they become lethal. This was the problem in describing the Okinawan Sarin accident – Sarin is a deadly weapon, but is technically non-lethal if the exposure dosage is under the mean lethal does. Under that mean lethal dosage a lethal weapon is not lethal – it is "harassing" or "incapacitating." Again, we have a shadow of rhetorical problems to come – the material components of a thing may not be sufficient determine its status as a weapon or, if it is a weapon, its status as a particular type of weapon. Attitudes must be applied to resolve the ambiguity. If we encounter a weapon that has not been used, it may not be possible to determine what sort of weapon it is. Even after use, the ambiguity may remain – a weapon that was used with non-lethal intent might still be lethal (consider rubber bullets, tear gas, tasers, etc). For all these reasons, there was not a detailed consensus on what the Geneva Protocol bans; it is a strongly worded ban on a vaguely defined category. It could have banned almost every weapon because of the ambiguity, but the international and domestic debate over the legality of the US's use of chemical weapons in Vietnam highlighted the need for clearer rules.

The second major interpretive issue outlined in the CIA report is the distinction between possession (stockpiling) and use. The Geneva Protocol dealt only with issues of use, therefore making stockpiling ostensibly legal.[119] This was, of course, the point at issue in the Secretary General's report – stockpiling was legal, but illogical and dangerous. Thus, a real ban on use should imply a ban on stockpiling even as this implication is not found in the Geneva Protocol.

[118] Intelligence Report Prepared by Directorate of Intelligence, Central Intelligence Agency, Washington, August 18, 1969, Foreign Relations Archive, 1969-1976.

[119] In fact, the problem is worse than this given that many of the signatories to the Protocol signed with reservations. The most common reservations being that the ban on use only applied to other nations that signed the Protocol and/or other nations actually following the ban. These reservations thus confirm the major worries of the UN Report.

As the CIA saw it, the British had opted to propose a treaty targeted at biological weapons primarily because they knew that the United States was already engaged in the use of certain chemical weapons which, by some interpretations, were understood as legal. Contra the British, the Soviet Union hoped to block a CBW treaty in Geneva so that it could raise the issue at the next U.N. Meeting in New York and, thus, embarrass the United States' idiosyncratic view that "harassing" and "incapacitating" gasses were not covered under the Geneva Protocol (which, in addition, the United States' legislative bodies never properly ratified). The CIA concluded that the Soviet Union had no other goal in the matter beyond this political maneuvering and has no real wish to sign an effective ban on CBW, though the report concedes that a variety of our allies are also against the British treaty for reasons similar to the Soviet's public objections. Japan, for instance, wanted a full ban (given the accident on Okinawa) while Sweden seemed to view both the US and the USSR (perhaps correctly) as "indifferent" to a ban. [120]

In trying to relate the relevant distinctions to policies, Halperin admitted that "it is difficult to pinpoint policy in some areas (e.g., chemical and biological incapacitants), and apparent contradictions exist between stated policy and actual practices."[121] He laid out a series of seven distinct categories of CBW weapons: Lethal Chemical, Chemical Incapacitants, Tear Gas, Chemical Herbicides, Lethal Biologicals, Biological Incapacitants, and Biological Herbicides.[122] In each case, the Joint Chiefs preferred to keep options open while the State Department preferred caution or a total ban. Whatever these weapons should be called, the

[120] Intelligence Report Prepared by Directorate of Intelligence, Central Intelligence Agency, Washington, August 18, 1969, Foreign Relations Archive, 1969-1976.

[121] Memorandum From Morton Halperin of the National Security Council Staff to the President's Assistant for National Security Affairs (Kissinger), Washington, August 28, 1969, Foreign Relations Archive, 1969-1976.

[122] Importantly, it is not clear where toxin weapons fall into this taxonomy. Toxins, like Botulinum, are produced by microbes, but are not organisms themselves. Thus by attempting to add more precision to the categories, certain objects don't fit. Categories are generated by way of analogy. Disanalogies will always present themselves.

military wanted the option to use them while the diplomats saw such options as only leading to international incidents and difficult negotiations.

The issues of definition were not the only things standing in the way of a definitive review of CBW. Halperin was unable to complete the review on time because the Department of Defense and Laird had not fully completed their inputs into the report. This would not normally have been a problem except that the extension requested by the Department of Defense would deliver the report to the President *after* the General Assembly meeting at which the CIA thought the Soviet Union would begin pressing the United States on CBW issues. That is, the US would still be in a policy holding pattern and unable to respond effectively to questions and challenges posed by the Soviets. In response to the extension, the Deputy Assistant Secretary of State Ronald Spiers wrote to Kissinger expressing exactly this concern. He wrote:

> While we may be able to use procedural devices to maneuver our way through many of the problems until a policy is developed, this is at best a temporary expedient and the absence of a policy will unquestionably make it difficult to obtain results from the General Assembly which are satisfactory from the US point of view.[123]

That is, the US diplomats would not be able to stall and could not guarantee that they could effectively lobby on behalf of the US on the UN floor because it would be impossible to lobby effectively toward an unknown goal. Nonetheless, the State Department agreed that the review should be completed as the Defense Department suggested. The only thing worse than stalling would be lobbying toward a policy that the Administration might later take issue with. Kissinger extended the deadline, but asked that, "all involved agencies [refrain] in the interim from public

[123] Memorandum From the Deputy Assistant Secretary of State for Political-Military Affairs (Spiers) to the President's Assistant for National Security Affairs (Kissinger), Washington, September 4, 1969, Foreign Relations Archive, 1969-1976, US Department of State Office of the Historian, accessed November 30, 2014, http://history.state.gov/.

statements or actions which would extend or revise current policies."[124] That is, please do not confuse the issue further and add to our already contradictory position on CBW.

In the weeks that followed, both the Secretary of State and the US Representative to the UN were left without a clear path ahead. In a conversation with the Soviet Foreign Minister about the Soviet's request at the General Assembly for a joint ban of chemical and biological weapons, Secretary of State William Rogers held the conversation to matters of procedure and questions about which venue would be appropriate for such a proposal.[125] In a telegram to the UN Committee, the Department of State advised the delegation to try for a "referral of all CBW items to CCD with substantive comments not going much beyond GA Res 2162B (XXI)" and to "avoid discussion [of riot control agents] whenever possible."[126] The aforementioned General Assembly Resolution (2162B) was essentially an affirmation in practice to the 1925 Geneva Protocol while referring the issue to the CCD (Committee on the Conference for Disarmament). All of this moved the issue down the road - just as the Soviet Union had by moving the issue from the Geneva talks to the General Assembly. Thus, State's advice was to say nothing new and, if possible, say nothing at all. In response to this freeze, UN Representative Charles Yost sent a letter to Kissinger asking for "advice and assistance on a matter of considerable concern to us here."[127] In the letter, Yost expressed his interest in having the US ratify the Geneva Protocol

[124] Memorandum From the President's Assistant for National Security Affairs (Kissinger) to Secretary of State Rogers, Washington, September 16, 1969, Foreign Relations Archive, 1969-1976, US Department of State Office of the Historian, accessed November 30, 2014, http://history.state.gov/.

[125] Memorandum of Conversation Between Secretary of State Rogers and Soviet Foreign Minister Gromyko, New York, September 22, 1969, 10–11 p.m. Foreign Relations Archive, 1969-1976, US Department of State Office of the Historian, accessed November 30, 2014, http://history.state.gov/.

[126] Telegram 168999 From the Department of State to the Mission to the United Nations, October 4, 1969, Foreign Relations Archive, 1969-1976, US Department of State Office of the Historian, accessed November 30, 2014, http://history.state.gov/.

[127] Letter From the Representative to the United Nations (Yost) to the President's Assistant for National Security Affairs (Kissinger), New York, October 29, 1969, Foreign Relations Archive, 1969-1976, US Department of State Office of the Historian, accessed November 30, 2014, http://history.state.gov/.

so as to move the talks in some direction but noted that, "we of course are handicapped by the fact that our policy review of the subject is still incomplete. Could you give me an estimate as to whether we are likely to have clarifying decisions on this matter by mid-November?"[128] Yost's request was nearly fulfilled – Kissinger wrote Yost back on November 13th explaining that the review was nearly complete and that advice would be forthcoming. [129]

At the National Security Council meeting in which the policy review was discussed, Kissinger (the chair of the meeting) proposed an agenda which moved the policy decisions regarding biological weapons to the forefront.[130] Whether chemical and biological weapons should be treated separately was, thus, thoroughly built-in to the conversation by the discussions and preliminary reports leading up to the meeting. Further, those reports as well as Kissinger's staff-created talking points turned the issue toward a choice between three options: first use of biological weapons, a retaliatory capability, or only an R&D capability.[131] Kissinger further framed the issue by dividing the third question in two: should we retain (1) an offensive and defensive R&D capability or (2) just a defensive one? In the discussion that ensued, some members of the group called into question the possibility of such a distinction. Admiral Frank Vannoy, one of the Joint Chief's argued that a defensive program without an offensive program was infeasible, since a meaningful defense would require weapons against which to test

[128] *Ibid.*

[129] Letter From the President's Assistant for National Security Affairs (Kissinger) to the Representative to the United Nations (Yost), Washington, November 13, 1969, Foreign Relations Archive, 1969-1976, US Department of State Office of the Historian, accessed November 30, 2014, http://history.state.gov/.

[130] Minutes of National Security Council Review Group Meeting, Washington, October 30, 1969, 2:25-3:55 p.m, Foreign Relations Archive, 1969-1976, US Department of State Office of the Historian, accessed November 30, 2014, http://history.state.gov/.

[131] Analytical Summary Prepared by the National Security Council Staff, Washington, undated Foreign Relations Archive, 1969-1976, US Department of State Office of the Historian, accessed November 30, 2014, http://history.state.gov/; Talking Points Prepared for the President's Assistant for National Security Affairs (Kissinger), Washington, undated, Foreign Relations Archive, 1969-1976, US Department of State Office of the Historian, accessed November 30, 2014, http://history.state.gov/.

defenses. Dr. Edward Proctor of the CIA and Vincent McRae of the Office of Science and Technology suggested that the distinction could be made meaningful by both avoiding mass production and leaving out engineering development (presumably of weapons systems and mass production). The Joint Chief's maintained that they would prefer to preserve a full biological weapons capability, to which Kissinger summarized the well-known arguments against the value of BW as a deterrent or retaliatory weapon.

Throughout the meeting, the recurring difficult issue to come to consensus on was whether future biological warfare programs would include both defensive and offensive R&D. However, part of the difficulty of the discussion lay on the difficulty in making a meaningful distinction between the two in the first place. The core of debate centered on the following questions: "Could [biological weapons] be broken down into offensive and defensive weapons?" Was there "a point in having defensive R&D only?" How can we "distinguish between offensive and defensive R&D?" Can "defensive R&D is impossible without offensive work?" Is it practically possible to "tell [if] a plant was being used for…offensive or defensive purposes?" Would it be "consistent [with the British draft] to pursue offensive R&D for defensive purposes?"[132] Importantly, on this last point Ronald Spiers from the State Department answers *no* because offensive research for the purposes of defense is not consistent with the current British Draft. At the end of the meeting, the group decided that the working paper only required three changes and one of them was "a clarification of the distinction between offensive and defensive R&D."[133] Because of the debate that arose, the group arrived at the same

[132] Minutes of National Security Council Review Group Meeting, Washington, October 30, 1969, 2:25-3:55 p.m, Foreign Relations Archive, 1969-1976.
[133] *Ibid.*

preoccupation with the offensive/defensive divide that had so preoccupied Laird in the months prior.

As a result of the meeting, the relatively short shrift given to the distinction in the review paper is expanded, but the clarification was of a somewhat limited nature. The original stated:

> The principal pro arguments [for a defense-only R&D] are: (a) that an R&D program protects against any technological surprise; (b) that nuclear weapons are sufficient to deter the use of CW weapons, and that this deterrent would be more credible without an actual CW capability; and (c) that it would eliminate the political problems with overseas storage.[134]

This does not amount to a description of what defensive research *is* just what it *does*. The final report was five times longer than the draft and contained three times the number of references to defense (twenty-five compared to seven). In the expanded sections, it tried more clearly to say what defense *is*. It stated:

> (1) Should the U.S. restrict its program to RDT&E [Research, Development, Testing, and Evaluation] for defensive purposes only or (2) should the U.S. conduct both offensive and defensive RDT&E? While it is agreed that even RDT&E for defensive purposes only would require some offensive R&D, it is also agreed that there is a distinction between the two issues. A defensive purposes only R&D program would emphasize basic and exploratory research on all aspects of BW warning devices, medical treatment and prophylaxis. RDT&E for offensive purposes would emphasize work on mass production and weaponization and would include standardization of new weapons and agents.[135]

In affirmation of these definitions, the report went on to say that even as a defense-only option would "degrade US capability to employ biological agents," "Maintenance of a defensive RDT&E program inherently requires some offensive RDT&E effort." That is, a defense only

[134] Analytical Summary Prepared by the National Security Council Staff, Washington, undated Foreign Relations Archive, 1969-1976.
[135] *Ibid.*

option would not *eliminate entirely* the US capability. Thus, offense is a necessary component of defense; defense is a sufficient one for offensive capability.

> As a single line addendum, the report included the following significant note:
>
> * Department of Defense prefers the terms "biological agents" or "biological research agents."

This is, of course, a reflection of Laird's preoccupation with the name of the program which was not at issue in the review meeting because Laird was not present (Assistant Secretary Nutter represented Defense). In the week between the report's circulation and the National Security Council meeting with the President, Laird and Kissinger spoke on the phone at least twice to discuss the report.[136] The notes from the first of these calls indicates that Laird was concerned with "the public affairs part of these discussions," and felt that it had been entirely overlooked in both the review meeting and the report. Specifically, Laird was worried that *any* program into "biological warfare cannot be supported by anyone."[137] However, a program into "biological research" was supportable.[138] It seems reasonable to think that Laird meant both that no one should support it (given Laird's repeated claims that biological weapons have no strategic value) and that no reasonable person in the public would support a thing called "biological warfare." In the call notes, Kissinger's exact response is somewhat obscure. He asked Laird "if that wasn't the purpose" of using the terms. Perhaps, then, Kissinger had used that term in the report to purposefully load that obviously objectionable position into the discussion. That Kissinger went

[136] Notes of Telephone Conversation Between the President's Assistant for National Security Affairs (Kissinger) and Secretary of Defense Laird, Washington, November 17, 1969, 7 p.m, , Foreign Relations Archive, 1969-1976, US Department of State Office of the Historian, accessed November 30, 2014, http://history.state.gov/; Notes of Telephone Conversation Between the President's Assistant for National Security Affairs (Kissinger) and Secretary of Defense Laird, Washington, November 18, 1969, 11:55 a.m., Foreign Relations Archive, 1969-1976, US Department of State Office of the Historian, accessed November 30, 2014, http://history.state.gov/.

[137] Notes of Telephone Conversation Between the President's Assistant for National Security Affairs (Kissinger) and Secretary of Defense Laird, Washington, November 17, 1969, 7 p.m, , Foreign Relations Archive, 1969-1976.

[138] *Ibid.*

on to encourage Laird to make this argument in the meeting and that such an argument would be "the thrust" seems to support this reading.[139] Kissinger and Laird planned to perform the core of the terminological debate and, perhaps, Kissinger planned to concede Laird's point in front of the President and other top staff.

Kissinger does not mention it to Laird, but by the time they talked Kissinger had already written a memo briefing the President that recommended "(research and development for defensive purposes) to include only enough offensive research and development to protect against technological surprise" and to support the British treaty only after some modifications.[140] In his reasons, Kissinger cited that while nuclear weapons were a sufficient deterrent, biological weapons were unpredictable and led to escalation. Further, a defensive program could guard against "technological surprise."[141] Essentially, Kissinger rearticulated the UN conclusions and added on a comment about the main benefit of a defensive program. The memo, like the report, did not include the "public affairs" issue mentioned by Laird.

The minutes of the meeting paint a cagey picture of Nixon. Either Nixon said little or the minutes record little of what he said. From what the minutes do mention, it seems that Nixon, like Laird and Kissinger, was concerned with a clear separation between chemical weapons and biological weapons as well as a "public relations" plan. His most substantial comment (judging by the minutes) seems to have been:

> We can fuzz up the language. We should develop a simple statement within 48 hours. Then I want a positive public statement. It should emphasize that this is an example of the right leadership, but which has the national security in mind.

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[139] *Ibid.*

[140] Memorandum From the President's Assistant for National Security Affairs (Kissinger) to President Nixon, Washington, November 17, 1969, Foreign Relations Archive, 1969-1976, US Department of State Office of the Historian, accessed November 30, 2014, http://history.state.gov/.

[141] *Ibid.*

Thus, within the meeting, Nixon was more insistent about the character of the policy's messaging than about any particular aspect of the policy itself, save, perhaps, that any ratification of the Geneva Protocol had to include an exception for tear gas. It may be that Nixon was already persuaded or in agreement with Kissinger's recommendations, or as Kissinger seems to have intimated, the report in conjunction with Kissinger's recommendations made it clear that there was only one way forward: renouncing biological weapons and converting over to a program of defensive RDT&E. While the details of this conversion were not yet worked out, Laird suggests and Nixon agreed that the biological research program should be moved to the Department of Health, Education, and Welfare (today, the Department of Health and Human Services which houses the Centers for Disease Control). Nixon commented that this sort of move "relaxes the scientists."[142] Here we see the means by which some of the risks of biological weapons research were relocated, by exporting some of the research itself outside of the suspicious military. These two changes, an emphasis on "defense" and a shift toward more civilian research, laid the groundwork for the transformation of the bioweapon and biothreat conversation and what I describe, below, as the rhetoric of defense.

When Laird said in November of 1969 that no one would support biological weapons, he had already ceded that ground publically. Throughout the Fall of 1969, the debate over funding chemical and biological weapons in the Senate and House took a series of opposing turns. On the one hand, the anti-CBW 'movement' spear-headed by Rep. McCarthy seemed to be winning

[142] *Ibid.*; Nixon may be speaking in generalities here or he may be making reference to the fact that his own Science Advisory Committee recommended renouncing biological weapons in the summer of 1968. Lee DuBridge (who was at the National Security Council meeting) had written to Kissinger in October of 1969 to remind Kissinger of this and to recommend that Nixon announce an anti-biological warfare policy at annual meeting of the Association for the Advancement of Science in Boston In either case, it plays into the narratives of identification between scientists. Memorandum, Presidential Science Advisor Lee A. DuBridge to National Security Advisor Henry Kissinger, October 22, 1969, National Security Archive Electronic Briefing Book No. 58, Volume III: Biowar, George Washington University, accessed November 30, 2014, http://www2.gwu.edu/~nsarchiv.

the public conversation. A new wave of Senators joined the series of public calls for investigations into CBW and public approvals for a ban on CBW research,[143] one Senator claimed that the Pentagon had purposefully withheld CBW research details from Nixon,[144] Secretary Laird publically backed a ban on germ weapons, and the Senate passed unanimously (91-0) a bill that was described as a major regulatory move against CBW.[145] There was also a brief, fresh wave of stories about the silent risk created by the presence of biological weapons facilities, especially Fort Detrick. The mysterious cow deaths near Detrick, which were at first not caused by biological weapons and then ambiguously related to them, were brought back into the spotlight by Rep. McCarthy. Rep. McCarthy, in an exemplarily paranoid move, simultaneously demanded absolute proof from the military that the cows were not killed by a bioweapon and claimed that no report from the military could be trusted.[146] On the other hand, under closer inspection, the appropriations bill passed by the Senate included almost all of the requested funding for CBW and its proposed ban on developing delivery systems was removed when the bill passed the House. As it became increasingly clear that the Administration would be coming out against CBW, with Laird leading the way, it became possible for politicians to be both for military spending and being against CBW. The two positions, once mutually exclusive, became suddenly consistent and the political drama created by the debate and its coverage faded away. Coverage of CBW shifted from fantastic stories about dangerous, secret locations to political maneuverings and international treaties. Eventually, it dissolved entirely as the object

[143] "Tydings seeks Detrick Report on Fever Study," *Washington Post-Times Herald*, July 26, 1969, F3; Spencer Rich, "Stennis May Support Move to Curb Germ Testing," *Washington Post-Times Herald*, August 9, 1969, A1.

[144] "CBW Data Kept from Nixon, Ribicoff Says," *Washington Post-Times Herald*, August 8, 1969, A19.

[145] "CBW Curb Endorsed by Laird," *Washington Post-Times Herald*, August 10, 1969, A1; "A Step Toward the Control of CBW," *Washington Post-Times Herald*, August 12, 1969, A16; "Senate Backs Curb on CBW Program," *Washington Post-Times Herald*, August 12, 1969, A1; "Laird Said to Urge War Germ Cutback," *Washington Post-Times Herald*, October 19. 1969, A30; "Against Biological War," *Washington Post-Times Herald*, October 22, 1969, A22.

[146] John Hanrahan, "Probes at Detrick Seen as Unreliable," *Washington Post-Times Herald*, August 1, 1969, B8.

of suspicion, the military, gave up control of its laboratories to civilian researchers (this is not a change in personnel but a change in leadership). The activist scientists who formerly spoke with the paranoid attitude would now have to turn that attitude toward themselves in order to maintain suspicion about CBW. In 1969, neither scientists nor the public redirected their suspicion toward the new civilian labs. However, this refrain from domestic suspicion is short-lived. As I show both below and in later chapters, current worries about biothreats involve extreme anxiety about domestic threats. Because biothreat fears stem from invisible threats, they cannot really be eliminated by moving around people and objects. The materials which can be biological weapons are ambiguous prior to use. As long as weapons might exist and people might use them, there will always be someone for the paranoid to suspect.

2.3.1 The Rhetoric of Defense

On November 25th, 1969, the same day that Nixon delivered his two speeches, National Security Decision Memorandum 35 was released. It enumerated the Administration's clear response to the earlier policy questions and the problems of ambiguity surrounding the term "CBW." Just as the Department of War became the Department of Defense in 1949, biological warfare became biological defense:

> The term Chemical and Biological Warfare (CBW) will no longer be used. The reference henceforth should be to the two categories separately — The Chemical Warfare Program and The Biological Research Program
>
> With respect to Bacteriological/Biological programs:
>
> a. The United States will renounce the use of lethal methods of bacteriological/biological warfare.
>
> b. The United States will similarly renounce the use of all other methods of bacteriological/biological warfare (for example, incapacitating agents).
>
> c. The United States bacteriological/biological programs will be confined to research and development for defensive purposes (immunization, safety measures, et cetera). This does not preclude research into those offensive aspects of

> bacteriological/biological agents necessary to determine what defensive measures are required. [147]

The policy framework was held together by two distinctions: Chemical/Biological and Offense/Defense. Under the former banner of CBW, it was possible for stories about any aspect of CBW to be stories about all aspects of CBW, thus, as was demonstrated above, a story could conflate and tie together nerve gas and anthrax without being confused. Now, a story about a *weapon* can only be a story about Chemical Warfare while a story about Biological Research can only be a story about safety and health research. The distinctions rely on one another and must be maintained simultaneously.

In the months after Nixon's speech, Laird policed the terminological border between the programs. Not only did he correct Kissinger in phone conversations - "don't call it CBW, that's what the opponents call it"[148] - but he also released a strongly worded memo to Secretary of State Rogers, Kissinger, and Director of the CIA Director Richard Helms in which Laird explained, "I notice that current documents of various U.S. Government Agencies continue to refer to CBW, i.e., chemical and biological warfare. Such terminology, I believe, is seriously misleading and should be stricken from our lexicon."[149] The memo explained, in three dense paragraphs, why these two programs must be set apart. Whereas before the policy shift Laird argued for the distinction for practical, political reasons, only one month later Laird treated the distinction as being about matters of fact and history. Laird explained that CBW was misleading

[147] National Security Decision Memorandum 35, Washington, November 25, 1969, Foreign Relations Archive, 1969-1976, US Department of State Office of the Historian, accessed November 30, 2014, http://history.state.gov/.

[148] Transcript of Telephone Conversation Between the President's Assistant for National Security Affairs (Kissinger) and Secretary of Defense Laird, Washington, November 18, 1969, 5:50 p.m., Foreign Relations Archive, 1969-1976, US Department of State Office of the Historian, accessed November 30, 2014, http://history.state.gov/.

[149] Memorandum to Secretary of State, et al. from Secretary of Defense Laird re Chemical Warfare and Biological Research—Terminology, December 9, 1969, National Security Archive Electronic Briefing Book No. 58, Volume III: Biowar, George Washington University, accessed November 30, 2014, http://www2.gwu.edu/~nsarchiv.

because "the term does not describe *even remotely* the United States program in the chemical and biological areas."[150] This memo is dated one week after Nixon's speech, Laird had not even yet examined how the military planned to destroy its biological agent stockpiles nor had the major biological weapons research facilities been shuttered and/or given over to civilian groups. Still, Laird talks as if he is describing actual practices happening at that moment in time. Laird went on to say that "[i]t is virtually impossible…to conceive of the circumstances in which chemical warfare and biological warfare, in a simultaneous or joint way, would be planned for and implemented." Laird argued that the two programs were so clearly distinct that one *could not even imagine* them paired together in some significant way, even though, up until a month before, that the Army seemed to have both imagined, referred to them, and administrated them jointly.

Laird's new way of talking, which became the approved policy of the Administration, aimed to avoid confusing "the American public, our allies, our potential adversaries, and even those in our own government responsible for defense programs."[151] That is, the fact that certain government agencies continued to use the term CBW indicated that they didn't understand the relevance of the distinction. Even worse, from that confusion in language might follow certain kinds of confused behavior.[152] Thus, Laird reminded the recipients of the memo that "[w]hile

[150] *Ibid.*, My emphasis.
[151] *Ibid.*
[152] *Washington Post* reported more than once on the fact that the Central Intelligence Agency continued work into illegal research into the 1970s. The story first emerges in Jack Anderson and Les Whitten, "Soviets Press Germ War Research: Washington Merry-Go-Round," *Washington Post-Times Herald*, December 27, 1975, D14. Then it is later recirculated as a story about Scientologists in George Lardner, "CIA Prolonged Research On Germ War, Group Says," *Washington Post-Times Herald*, March 11, 1980, A4.

terminology may seem a minor point in some cases, this is one instance in which precise terminology is necessary."[153]

Laird's terminological distinction between chemical and biological along with the linked distinction between offense and defense has a host of material and rhetorical consequences, but the most important of these consequences is that defense implies something to defend against. Defense is necessarily defense *against*, even if the object of the defense remains unstated. The new policy is not a dissolution of paranoia, but a relocation of its appropriate object. In the debates about what policy track to take, several distinct possible positions emerged. (1) An offensive logic: We wish to possess a kind of weapon with the expressed intent to use it on *others* who are worthy of our suspicion. (2) A retaliatory/deterrent logic: We wish to possess a kind of weapons specifically because *others* who are worthy of our suspicion possess such a weapon; our mutual possession serves to ensure that use never occurs. (3) A defensive logic: *Others* who are worthy of our suspicion possess or wish to possess a kind of weapon with the expressed intent to use it on us. All three logics tell a story about the relationship between America and some kind of enemy. The constant need to make sure that a loophole exists in the Geneva Protocol for non-lethal chemical weapons only made sense in the context of America's engagement in Vietnam and, to a lesser degree, the use of non-lethal gas weapons domestically by American police. The story about deterrent capabilities only made sense in the context of an assumed standoff between America and the Soviet Union. Similarly, a defense only makes sense in relation to an enemy. What is most remarkable about this third and now dominant logic of defense is the fact that it does not actually require there to be a substantiated enemy *today*. All that is necessary to sustain this story is a justified anxiety that there *might be* such an enemy at

[153] Memorandum to Secretary of State, et al. from Secretary of Defense Laird re Chemical Warfare and Biological Research—Terminology, December 9, 1969, National Security Archive Electronic Briefing Book No. 58.

some point. That is to say, the logic of defense requires, at minimum, paranoia. In 1969 there was no stated object for the rhetoric of defense. It pointed outward toward an expected enemy.

The new policy that created the Biological Research Program did not mention a specific enemy when describing the new defensive project.[154] Nonetheless, Nixon's public speeches described two different, possible enemies, one implicit and one explicit. In speaking to the general public from the Roosevelt Room, Nixon said that he would confine biological defense to research, "on techniques of immunization, and on measure of controlling and preventing the spread of disease."[155] In his speech at Detrick, however, his conclusion reminds the audience that "the limiting of our programs to research [would not] leave us vulnerable to surprise by an enemy who does not observe these rational restraints."[156] That is, the defensive program was meant to be defensive exactly against surprise, the so-called "technological surprise" that appeared as a concern in the National Security Review as well as Kissinger's recommendations to Nixon. Given the Cold War, it is not hard to see the Soveiet Union as the suspected enemy. After all, it is the Soviet Union's capability which so preoccupied military officials and formerly required the United States to have a retaliatory capability (until retaliation and deterrence became as unthinkable and suicidal as first-use). Of course, implicating the Soviet Union while attempting to negotiate a treaty with them would not have played well in Geneva. Instead, we were left with an empty placeholder in which an enemy might fit, a generic enemy that is *out there* somewhere.

Here, finally, we see the successful, rhetorical re-location of biothreat risk along with the relocation of suspicion onto a new object that can nurture and sustain the paranoid attitude. This

[154] National Security Decision Memorandum 35, Washington, November 25, 1969, Foreign Relations Archive, 1969-1976.
[155] Nixon, "Remarks Announcing Decisions."
[156] Nixon, "Statement."

new way of talking is remarkable, at least, because it is for the Administration finally a coherent way of presenting what research into biothreats is *for* while simultaneously admitting that such research had been going on before without such a purpose. This is more than merely claiming, as Administrations often do, that it was the fault of a previous Administration (though Secretary Laird did tell the press specifically that it was Kennedy who chose to put nerve gas on Okinawa[157]). Instead, Nixon claimed that the big-picture of the US biological and chemical warfare programs were not known to anyone. Indeed, if such a view been known, then the review carried out would hardly have been "the first thorough review ever undertaken at the Presidential level."[158] Thus, if Nixon was guilty of anything it was that he did not investigate sooner. As he told it, he had not purposefully pursued a path toward a dangerous and suicidal biological war.[159] In doing so, of course, he implicitly put the blame elsewhere, made a claim about moving forward, and cleared the way for a better, biosafe (or at least biosafer) United States in the future.

2.3.2 From Guilt to Sterilization

Nixon's speech placed him at an inflection point from which the United States realized its missteps and seeks to correct them. He proclaimed that the US was guilty and that military research had gone astray due to an absence of leadership (a scapegoat), but the new policies would help change the former headless war machine into an engine of health(purification). The public had been right to be paranoid. How could we judge them for criticizing the military with

[157] Wilson, "Nerve Gas."
[158] Nixon, "Remarks."
[159] Though the focus here is about the stories and not matters of fact, it is remarkable to think that this might be, to some degree, true. In the minutes of the National Security Council meeting, Nixon remarks in response to the CIA briefing on enemy biological and chemical programs that "I hope we know more about ours than about theirs."

such feeble evidence when, in the end, it turns out that no one really knew what was going on? The crime of the President (and Congress) was one of a lack of oversight, but it was the military who actually took the research too far and brought too many dangers onto American soil. Seen this way, the debate about biological weapons was a debate between the Administration and the military and the press coverage of the military immediately after Nixon's speech reinforce this perfectly. The front page of the *Post* on November 27th declared, "Military Rebuffed on CBW."[160] The article describes the ban like a contest between the Joint Chiefs and the President. In the end, Nixon seemed to have won that war but lost a key battle, as he failed to ban tear gas and defoliants in the Vietnam theatre. (He never hoped to win that war, of course.) Thus, our own military was exactly the kind of irrational actor against whom we now stand with the new ban on biological weapons. Thankfully, as already admitted, the military was happy to limit its use to only those weapons allowed by civilian oversight. The military was not a monolithic, tragic villain. They too were merely misled by vague policies and believed themselves always to be pursuing their mission.

While some of the ban was meted out simply by cutting off or reorganizing funding, it was also the case that Nixon's ban required both the destruction of agents and the transfer of certain "biological research" facilities to civilian organizations. Thus, our germ swords were beaten into germ ploughshares. This process is a two-part sterilization and includes a narrative decontamination of our biothreat past. Both decontaminations are smooth ones since, ironically, the dangerous biological agents are in fact quite fragile. Dr. Donald MacArthur, deputy director of research for the Department of Defense, is quoted as saying that destroying the stockpile of

[160] Richard Homan, "Military Rebuffed On CBW: Nixon, Laird Barred Plea for More Weapons Joint Chiefs Rebuffed by Nixon, Laird on CBW Issue," *Washington Post-Times Herald*, November 27, 1969, A1; For another example of the military as "bad guys" see Joseph Kraft, "Disarming the Armorers: Decline in Influence of Military Is Apparent In CBW and Nuclear Treaty Actions," *Washington Post- Times Herald*, November 30, 1969, A39.

BW agents will present no problem primarily because "biological material it [sic] very easily killed by heating, in other words, sterilization." Storing the agents was presented as having all along been a highly problematic enterprise because being in the open air is fatal to many of the disease weapons, "Light kills them..."[161] To carry out this process of sterilization, the military fell back on an old technique, dumping our weapons in a nearby body of water.[162] In 1971, the military destroyed biological agent stockpiles at Fort Detrick and began transitioning the Fort's labs to civilian work.[163] Later in the year Pine Bluff Arsenal followed suit.[164] The innovation here in ways of talking is quite impressive. Whereas before it seemed as if nothing could make these facilities safe, a shift in oversight seems to be sufficient for converting a place "which one produced biological weapons of mass death" into a place for "peaceful research."[165] Further, this is done without firing any of the laboratory employees. We just don't do things like that *here* anymore.

2.4 THE NEW BIOTHREATS: THE REAL PAST/IMAGINATIVE FUTURE

The shift of the bases over to civilian research completed the purification of the United States' motives and places. However, because the purification had as its foundation the relocation of biothreats, the threats must actually go somewhere. Paranoia must be sustained by

[161] Homan, "Military Rebuffed."
[162] Kirk Scharfenberg, "U.S. to Dump Anticrop Stock Into Monacy River in '71," *Washington Post-Times Herald*, December 19, 1970, A5.
[163] Stuart Auerbach, "Shift of Germ Warfare Sites to Civilian Use Proposed," *Washington Post-Times Herald*, December 28, 1969, 26; "U.S. Studies Detrick As A Research Center," *Washington Post-Times Herald*, February 24, 1971, C2.
[164] Victor Cohn, "Germ Warfare Site to Close," *Washington Post-Times Herald*, January 28, 1971, A7; "Pine Bluff Arsenal Facility Shifted to Civilian Research," *Washington Post-Times Herald*, April 15, 1971, A3.
[165] *Ibid.*

the existence of an object of suspicion, even if the object is a hypothetical one. Biothreats do not come from *here*; instead, we defend against such threats that come from people not like us, actors who do not follow our "rational restraints," actors who are from elsewhere. Starting in the winter of 1969, a new group of stories about biothreats emerged in the press which served to reinforce the logic of defense by both reminding the public of its formerly well-justified paranoia and offering it new objects of suspicion. The stories about military base decontaminations serve as a link back to a more dangerous time when the military ran the kinds of tests which drew the ire of the public in 1969. Simultaneously, they serve as a link forward to the terrors that have not yet been visited on us, the horrors of "surprise" and the weapons pursued by the irrational. On the whole, however, biological and chemical weapons faded from the journalistic conversation. There were, for example, three times as many CBW-related articles in the *Washington Post* in 1969 as in the entire period between 1970 and 1980. Thus, the stories that follow are finer threads than those above, but, as a result, the themes are far more distinct than in 1969 when the political conversation was awash with ambiguity and tension.

During 1969, the two most recirculated stories of domestic accidents were the 1968 Skull Valley Sheep Kill and the dramatic, international incident caused by the nerve gas leak on Okinawa. Given the relatively long tenure of the United States' practice of testing and stockpiling germ and chemical agents, these incidents were not isolated and investigative journalists in the 1970's uncovered a host of similar activities from decades past. An interview with a retired General in 1975 revealed that, while at Detrick in the 1950's, he had fallen ill to pneumonic plague.[166] Further, he claimed that such an infection was business as usual at Detrick and, indeed, his fellow soldiers frequently had fallen ill to Q Fever, Tularemia, and Venezuelan

[166] Bill Richards, "Plague Case At Ft. Detrick Hushed in '59," *Washington Post-Times Herald*, September 25, 1975, A7.

Equine Encephalitis (all diseases researched by biological weapons researchers). In addition to accidents, more details about the vast Army testing program were brought to light during the 1970's. In a front-page article from 1976, the *Post* explained that during the 50's and 60's the US carried out a series of BW simulations in US cities, at least some of which may have caused civilian deaths.[167] In Mechanicsburg, *Aspergillus* fungus (which can be fatal to humans) was dispersed into the air. In 1952, Ft. McClellan saw a doubling of Pneumonia cases after an army test there. In Key West, the pneumonia cases increased by a factor of ten (including a seven-fold increase in pneumonia deaths). New York and San Francisco were also sites for large "vulnerability" tests. Dispersants were sprayed into the air in San Francisco and a light bulb filled with bacteria was dropped in a New York City subway. Though the bacteria used in those tests were considered to be "harmless", military scientists admit that it could cause pneumonia.

This set of tests is then dwarfed by a front-page piece by George Wilson with the dramatic and self-explanatory title, "Army Conducted 239 Secret, Open-Air Germ Warfare Tests."[168] Importantly, this is not a piece of investigative journalism, but merely an open testimony by Army officials on Capitol Hill in the Spring of 1977. Under the shield of Nixon's 1969 policy, this news is shocking but, of course, merely more evidence that Nixon's review was necessary and the public's former paranoia was both warranted and no longer necessary. These stories recirculated in the 1980's as the Army continued to declassify its research.[169] When the Army revealed these tests during the 1970's, Senator Richard Schweiker (later the Secretary of

[167] John Cummings and Drew Fetherson, "Germ War Test in Cities: Army Admits Simulated Attacks Army Tested Germ Warfare Methods on Cities," *Washington Post-Times Herald*, December 22, 1976, A1.

[168] George Wilson, "Army Conducted 239 Secret, Open-Air Germ Warfare Tests: Army Conducted Outdoor Germ Warfare Tests," *Washington Post-Times Herald*, March 9,1977, A1.

[169] George Lardner Jr., "Army Report Details Germ War Exercise In N.Y. Subway in '66," *Washington Post-Times Herald*, April 22, 1980, A9; "Germ War Testing Was Held in Area," *Washington Post-Times Herald*, June 9, 1980, A11.

Health under President Regan) called for deeper investigation into similar programs of testing.[170] The story about Schweiker's investigation emphasized the 'unimaginability' of BW research as the Senator wondered "what we hoped to learn". He also echoed the moral tone used by Nixon, calling the tests "a devastating repudiation of the ideals of human liberty that the Army and other organs of government are charged with defending." Senator Schweiker's comments reinforced Nixon's and Thant's former claims that such research was always irrational and suicidal.

Even as these stories reinforced the irrationality of offensive warfare, they also served to reinforce the necessity of defensive research. One of the most dramatic events that emerges in these stories about former sins is the discovery of United States' relationship with Japan's Biological Warfare program during World War II.[171] After World War II, the U.S. government gave asylum to Japanese researchers who had conducted human experimentation with germ agents. One of the Japanese Prime Minister's officials called the work "regrettable," explaining that it had been done under "extraordinary wartime conditions."[172] These extraordinary conditions are meant to explain without forgiving not only the "gruesome" experiments, some of which were done on American POWs, but the strange post-war partnership between the Japanese scientists and the American military. According to the story, this partnership with the Japanese was necessary because their program had generated real data about how humans react to prototype germ weapons, experiments which, according to the story, the United States would not

[170] "Sen. Schweiker Seeks Probe of Germ War Tests," *Washington Post-Times Herald*, December 28, 1976, A3.
[171] P. Chen, "Japan Confirms Germ War Testing In World War II," *Washington Post-Times Herald*, April 8, 1982, A19; Philip J. Hilts, "Pact With Japan Hid Results Of Germ War Tests on POWs," *Washington Post-Times Herald*, October 31, 1981, A3.
[172] Hilts "Pact"

have done.[173] Thus, even as the US's own research had gone awry, there remained some boundaries which were not crossed.

Senator Schweiker's inquiry and the stories about Japan both pointed to the presence of research which was at once unthinkable and real. This real but unthinkable past is the point of departure from which the rhetoric of defense demands we look forward to a not-yet-real but imaginable future. Thus, we must guard against 'technological surprise' by thinking like the enemy. This is the way in which biological research of a defensive nature ultimately relies upon offensive research. Even as the stories about Nixon showed him as squaring off against the military, the rhetoric of his policy totally embraced military logic. As General Austin Betts explains in condemning Nixon's ban on biological warfare:

> It seems to me that it would be absolutely indefensible for us to cease all offensive lethal weapon development…it would be foolish if we ceased doing offensive development work that denied us the knowledge of what it takes to defend against any agent that our technology might conceive.[174]

This sentiment is indistinguishable from the sentiment offered by the National Security Council in elaborating the new program into defensive biological research. This need to think like the enemy, to imagine our own destruction, became of central import in the struggle against risk and for safety. By showing how misguided we were in the past, the rhetoric of defense uses the past to relocate danger into the imagination. Thankfully, the Japanese (and, below, the Soviets) serve to stand in for this imagination. I say thankfully because, as I demonstrate below, this new, imaginative danger relocates risk everywhere and ultimately eliminates the possibility for biosafety, leaving only a hope of preparedness.

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[173] This is, of course, not strictly true. While the United States does not seem to have experimented on POWs, experiments were done on American citizens. The most publically known example of such experimentation was done under Project Whitecoat in which just over 2,000 U.S. Army soldiers submitted to various biological agent testing. Many of these were conscientious objectors of the Seventh-Day Adventist faith.

[174] "Joint Chiefs Rebuffed."

While it is possible to imagine risk without a clear enemy, the Soviet Union provided a clear object of suspicion for the remainder of the Cold War. When The Biological Weapons and Toxins Convention was signed, a space opened for stories about how both the United States and the Soviet Union were honoring their promises. As explained above, the United States very publically began destroying stockpiles and converting bases (even as some labs, like the CIAs, seem to have continued business as usual).[175] At the same time, stories emerged about the Soviet Union working at cross purposes. In these new stories, the Soviet Union was no longer deserving of the benefit of skepticism. They became the enemy the military had been warning us about all along. Further, these stories rearticulated the unthinkable consequences of biological weapons; one story, in trying to contextualize the danger created by the Soviet's continued research, explained that:

> One expert has estimated that 10 airplanes, each loaded with 10,000 pounds of dry biological warfare material, could scatter enough bacteria over the United States to knock out one-third of the population.[176]

In the 1980's, this narrative recirculated and took on a new shape as the risk posed by the Soviet Union was compounded by terrifying advances in biotechnology. In 1984, the *Post* published a series of articles that brought together conclusions by the Defense Intelligence Agency and a Soviet Scientist from behind the Iron Curtain. In the first article, the Soviets are implicated in the large-scale acquisition of various technologies which could be used for BW. In the second piece, a Soviet scientist who developed a mathematical model for predicting disease epidemic behavior worried that his model could be used to control for the spread of a BW agent. These articles demonstrate the ambiguity of defensive research, at least when it is done in the Soviet

[175] As mentioned in note 234, the CIA continued research into biological weapons after Nixon's ban. See Anderson and Whitten, "Soviets" and Lardner "CIA prolonged."

[176] Anderson and Whitten, "Soviets Press Germ War Research."

Union.[177] For instance, suspicion is raised in the purchase of certain decontamination equipment because it can be used to aerosolize not only decontaminants but also contaminants. One suspects that the National Institute of Health's purchase of such equipment generally raises no eyebrows.

Because the defensive research grows out of the basic assumption that there might be weapons that we have not yet imagined, an unchecked paranoid attitude quickly becomes capable of imagining situations against which we could never defend. There is evidence already in the 1970's that such a moment has come. Defense is a logic of horizons created by our own scruples and rationality, however nature and the progress of science outstrip both. On August 16th 1970, the *Post* published the remarks of Nobel Prize winning geneticist, Joshua Lederberg, made at the disarmament talks in Geneva. In his talk, Lederberg cited recent research done at the University of Wisconsin to synthesize genes and speculated about the kind of experiments that might be done by those who wish to make dangerous diseases more deadly. Such work, even if done in secret would eventually come to light and be accessible by anyone who might want to proceed on such a path. Lederberg argued that no kind of monitoring system would be enough to protect us against biological threats, and only the robust growth of the public health system could hope to save us. At length, Lederberg explains:

> Even after agreement to eliminate biological weapons, we will still remain very vulnerable to a form of biological warfare that is beyond the reach of any covenant that we can make. This is the warfare practiced upon us by nature, the unremitting barrage of infection by old and by new agents that still constitute a very large part of the perils to normal and healthy life…[w]e must expect that there are many additional viruses already

[177] This is not to suggest that the stories are products of *pure* imagination. There exist numerous reports by Soviet defectors which would seem to confirm that the Soviet Union's military infrastructure was not honoring the Biological Weapons Treaty. The best known of these are arguably Sergei Popov and Ken Alibek, both of whom were debriefed in the 1990's and became part of the American conversation through PBS's *NOVA* series on "Interviews with Biowarriors," Transcripts available at http://www.pbs.org/wgbh/nova/bioterror/biowarriors.html.

> indigenous to primate and human populations in primitive areas and to which the inhabitants of advanced countries are extremely vulnerable.[178]

Lederberg demonstrates here the ways in which the logic of defense was already coextensive with the logic of public health. We need not imagine the danger created by enemies, but merely look to the frailties and weaknesses present in our bodies and populations. Eliminating our human bio-enemies will not be enough; biosafety will take nothing less than a world without disease (and such a world is surely impossible). The rhetoric of defense found in public health a paranoid partner with which to relocate biothreat risks. Together, they relocated biothreats to everywhere.

2.5 CONCLUSION: THE RELOCATED BIOTHREAT AND THE IMPOSSIBILITY OF SAFETY

While it seemed clear during 1969 that one of the major reasons for banning biological and chemical weapons was a drive to make us safer, to relocate biothreats, the consequences of this new way of speaking and thinking make safety impossible by first requiring that we defend *against* and then allowing that defense to be against any enemy, even an imagined one. When stories about Army tests were recirculated after Nixon's ban, they were transformed in a remarkable way. In 1969, they served as evidence that we were not safe, even as proof of those risks was 'uncertain.' Above, I laid out a series of articles about 'revelations' made by the Army about their various testing programs in the 1950's and 1960's. Writing in summary of these in

[178] Joshua Lederberg, "Engineering Viruses for Health or Warfare: Threat to Crops," *Washington Post, Times Herald*, August 16, 1970, B2.

1977, investigative journalists and *Washington Merry Go-Round* columnists Jack Anderson and Les Whitten concluded that "no one has bothered to prepare plans to protect American citizens against a biological attack."[179] Remarkably in this article which might seem to be a critique of the government, Anderson and Whitten echo the essential sentiment of Nixon's new rhetoric. In 1968, Rep. McCarthy turned the paranoid attitude against the military and the Administration to demonstrate that *they could not prove* that their actions were not risky. In 1969 Nixon's policy turned that logic on its head and created room for a new public critique of the government, now the government has shown that we may be *unable to prove* that we are safe. In 1969, the tests were the risks themselves. By 1977, they were evidence of risks that may come from elsewhere, from *out there*, from enemies imagined and real, or from Mother Nature herself.

As I suggest above, the rhetoric of defense seems magnified when allied with the logic of public health. When the human biothreat is combined with the 'natural' one, risk seems to proliferate in all directions, making the very environment around us the object of suspicion. This synergy in ways of thinking has important consequences, some of which I must defer to later chapters - chief amongst these is the incredible power that the rhetoric of defense gives to experts in epidemiology, experts in the presence of lurking, invisible disease threats. One consequence which deserves consideration here is the way in which defense research becomes co-extensive with what Andrew Lakoff has called "vital systems security," a method of public health security that "does not seek information about a foreign enemy or about regularly occurring events but, rather, uses techniques of imaginative enactment to generate knowledge about internal system–

[179] Jack Anderson and Les Whitten, "U.S. Lacks Germ War Defense," *Washington Post-Times Herald*, April 7. 1977, A17.

vulnerabilities."[180] That is, it uses imaginative simulations to "discover" how threats will breach public systems. In Lakoff's view, this method of public health planning is exemplified in the attempts by the Ford administration to plan for a possible Swine-flu epidemic in 1976. There, prevention was both impossible (because it required mass vaccination) and undesirable (because raising awareness of the threat would create fear and the risk of failure was too high). As a result, the CDC developed an innovative plan that eschewed prevention for preparedness; it assumed the possibility of disaster and simply made itself ready. Lakoff traces the intellectual connections between military logistics and public health by demonstrating how a tropical disease simulation (modelled after a war game) was taken up by epidemiologists like the aforementioned Josh Lederberg and D.A. Henderson (now the head of the University of Pittsburg Medical Center's Center for Biosecurity) into a new, surveillance-oriented public health plan. For Lederberg and Henderson, the source of the threat was, in a real way, unpredictable and, therefore, locating and substantiating the source was potentially irrelevant. What mattered was surveillance and preparedness. Thus, Henderson and Lederberg founded a Civilian Biodefense Study organization at John Hopkins, received funding from the Office of Bioterrorism Preparedness and Response, and ran the now-famous Dark Winter exercise in which a table-top simulation of a terrorist-induced smallpox epidemic was run. The exercise demonstrated what it was meant to, of course, that the United States is not prepared for such an attack.

In the absence of real 'tests' of biological weapons, this practice of simulation is a perfect match for the new, defensive biological research program. The shift that Lakoff demonstrates shows how the whole of public health in the United States slowly moved away from the prevention of big, foreseeable risks and toward preparation for unpredictable, catastrophic

[180] Andrew Lakoff, "The Generic Biothreat, or, How We Became Unprepared," *Cultural Anthropology* 23, no. 3 (2008): 403.

events. What I have demonstrated above is a parallel shift that at first presages such a move and then becomes coextensive with it. Nixon moved the American orientation toward biothreats away from a culture of retaliation (prevention) and toward one centered on defense and prediction (preparedness). Like 'mother nature,' Nixon's enemy is an irrational, unpredictable one that is always potentially engaged in research and development into the next terrible weapon. We cannot prevent an attack any more than we can prevent a flu outbreak. What we hope for in both cases is that we are not *surprised* and that we did not create the risk ourselves. Paranoia triumphs as a practical attitude because what you don't know *can* kill you.

Lakoff is motivated to demonstrate this shift toward "biopreparedness" because it focuses attention on the security of systems at the exclusion of other factors and these possible consequences make his analysis particularly relevant here. For example, Lakoff is troubled that under this new way of thinking, it is difficult or at least unlikely that a public health analyst would understand poverty as a contributing risk to a disease outbreak. In his words, "the ongoing living conditions of populations [are] outside the purview of a biopreparedness system."[181] In the chapters that follow, I draw out similar blind spots created by the rhetoric of defense. This new way of talking which sprung out of Laird and Kissinger's moves to thread difficult issues of international policy forever altered the acceptable warrants for making the claim 'you are a bioweaponeer,' severing them from their material origins. Given up to the paranoid imagination, the unpredictable and irrational biothreat, embodied in the bioterrorist, is both everywhere and nowhere.

[181] *Ibid* 422.

3.0 CREATING BIOTERRORISM

> Is there a madman lurking in The Dalles? The poisoning was an insane act, an act of violent hatred, carried on with subtle means. There must be such a person or persons with the motive and ability to assault this town, for it actually happened.
>
> – Representative James Weaver (D-OR) on the House Floor (1985)[1]

In 1981, a spiritual Guru known then as Bhagwan Shree Rajneesh came to Oregon. His personal secretary, Ma Anand Sheela, purchased a nearly 65k acre ranch called 'Big Muddy' and Rajneesh and his followers began a long, difficult relationship with the Oregonians. The ranch was incorporated as the town of Rajneeshpuram and quickly became locked in a series of legal, cultural, and political conflicts. The community, the Rajneeshee, followed the unique and controversial teachings of its Guru, Rajneesh, who had previously fled India after his ashram had come under scrutiny by the Indian government. In America, Rajneesh had a reputation for saying little, teaching sexual liberation, and driving around his compound in one of his many Rolls Royce cars.[2]

In 1984, Rajneesh's secretary and several other of his followers (the Rajneeshee) contaminated a series of salad bars with lab-grown *Salmonella typhimurium*, the bacteria responsible for the common food poisoning infection known colloquially as Salmonella or

[1] Representative James Weaver, "The Town That Was Poisoned," 99th Congress, 1st session, *Congressional Record* 131 (February 28, 1985): 4185–4189.

[2] The Rajneeshee movement is detailed in a host of monographs, as the Guru known as Rajneesh (and sometimes Osho) operated in several countries for some time.

medically as Salmonellosis or *Salmonella* gastroenteritis. The goal of the attacks was either to directly affect the outcome of an upcoming election or test the Salmonella for a bigger contamination, possibly of the water supply. The contaminated salad bars, all located near The Dalles, Oregon, made over 700 people ill and created a brief public health crisis. In 1984, epidemiologists were unable to find the source of the contamination, but some local residents and officials suspected the Rajneeshee as the source of the unexplained outbreak. Searches of the compound (prompted for reasons other than the poisoning) later uncovered *Salmonella* samples in a clinic on the Rajneesh compound. Even though forensic scientists ruled out these samples as the source of the poisonings, one of the members of the group turned state's evidence on two others and provided federal investigators with a detailed account of how the poisoning was carried out. The accused entered Alford pleas[3] in 1986 to a host of federal crimes, including the mass poisoning. A little over two years later, both were released from federal prison early and fled the country before the State of Oregon was able to press additional charges against them.

Outside of Oregon, however, the event drew relatively little attention, at least during the 1980's. Between 1984 and 2001, the event went through a series of transformations in the literature that described it. As a case of mass food poisoning by a strange 'cult,' the story received some coverage, but since the defendants plead out, the case was brief and failed to capture the attention of the national press for long. In 1997 the epidemiologists who originally investigated the outbreak publish an article in the *Journal of the American Medical Association*

[3] An Alford plea is a specific type of criminal plea in which the defendant enters a guilty plea while still insisting on his or her innocence. Instead of admitting guilt, the defendant admits that the evidence is such that the prosecution will be persuasive to a jury. That is, the defendant is admitting that he or she will be convicted, not that he or she committed the crime.

(*JAMA*) detailing the "intentional contamination."[4] However, in that article, the authors describe the relevance of the case by linking it to the then-recent discovery that the Japanese cult Aum Shinrikyo had successfully used Sarin gas and attempted to use anthrax to attack the civilian population of Japan. The *JAMA* article called Aum Shinrikyo terrorists and drew an explicit comparison between them and the Rajneeshee. By 2000, the Rajneesh food poisoning became the Rajneesh bioterror attack, the first bioterror attack on American soil.

In Chapter 2, I demonstrated the way in which Richard Nixon embraced the paranoid attitude of his critics in order to create a new language to articulate the relationship between the United States and Biological Weapons. His new way of speaking about bioweapons, the rhetoric of defense, first confirmed the threat and then relocated the origin of bioweapons outside of the State. Neither would the United States engage in the creation of bioweapons nor could any rational actor contemplate their use. During the Cold War, that non-rational actor was largely (at least symbolically) the Soviet Union. The case of the Rajneeshee poisoning is interesting because it seems, at first, different from what Nixon's defensive rhetoric had in mind. In this chapter I will demonstrate how, after the fading of the Soviet Union, the biothreat mounts a return to the United States. Skeptical disease investigators are, at first, unable to imagine the presence of the irrational actor within the homeland, but the paranoid attitude provides a corrective and, again, shines the light on a biothreat in the homeland. To do this, I provide a series of accounts of the Rajneesh intentional contamination/bioterror attack. The event is important, as are the 2001 anthrax mailings, in twenty-first century descriptions of the bioterror threat because it is generally regarded as the first of a very few incidents (one or two, depending on the accounting) which could be real examples of bioterror attacks in the United States. Yet, it

[4] Thomas J. Török et al., "A Large Community Outbreak of Salmonellosis Caused by Intentional Contamination of Restaurant Salad Bars," *Journal of the American Medical Association*, 278, no. 5 (1997): 389-395.

does not seem to have been understood as part of either the cultural conversation about terrorism or the cultural conversation about biological weapons in its own decade. As I demonstrate below, the event seems to inexplicably avoid association with both terrorism and biological weapons until the 1990's at which time the event transitions into becoming the exemplar for both simultaneously. It becomes not only a bioterror attack, but the first successful bioterror attack on US soil. As such, it is a unique moment in which a biothreat is not just found, but created and shaped into a bio*terror* threat. The event and its re-imagination are additionally interesting as a site of struggle between skepticism and paranoia about human-caused biothreats. The outbreak is, as I show, a site of substantial failure for skeptical scientists who rule out the possibility of a human-caused poisoning. Their inability to find the case of the outbreak creates a space for the paranoid attitude to emerge and, as in the case of the sheep near Dugway and the cows near Detrick, triumph. As in the 60's, the paranoid attitude wins the day, but in the outbreak in The Dalles the struggle is far longer and has much further reaching consequences. In this episode the skeptical attitude finds, upon reflection, that it may be an inadequate and even inappropriate counter-balance for the paranoid.

In what follows, I first place the press coverage of the Rajneesh event in the context of the press coverage of Biological Weapons in the mid-1980's. That is, I hope to show that it is at least peculiar that, at a time in which journalists seemed ready to write about germ threats, this event was never recruited into that theme. Next, I will describe generally how the story is named explicitly and defined by association with other events. To do this, I proceed first through local coverage of the event in the *Oregonian* and then through national coverage in the *Washington*

Post, *New York Times*, and *Los Angeles Times*.[5] After laying out this narrative history, I follow the story from the 1980's to 1997 when epidemiologist Thomas Török published on the "outbreak" and associates it with the chemical/biological terrorist activities of Aum Shinrikyo. A year later, W. Seth Carus, a researcher at the National Defense University, wrote what is now the definitive account of the Rajneeshee event as a bioterror attack. I follow the event through its various transformations. In doing so I show the event is made into a bioterror attack, how expert knowledge of the event is negotiated between scientific and criminal investigators, and how the case is used to construct not only a plausible but a real biothreat in the American past. As I argue below, at the heart of the Rajneeshee event is a definitional tension between the motives and materials of bioterror and attitudinal tension between skepticism and paranoia. For bioterror, motive becomes a key term and, as I show in Chapter 4, a key object of expertise for the paranoid attitude. In the final section of this Chapter I will consider some of the consequences of this relationship between paranoid and motive in the failed (and, arguably, wrongful) prosecution of Steve Kurtz, an Art Professor who was pursued for four years under suspicion of bioterror-related crimes. Kurtz's story provides a sobering view of the consequences of the degradation of skepticism and the triumph of paranoia in biothreat investigations.

3.1 INTENTIONAL CONTAMINATION & GERM WARFARE

As detailed in Chapter 2, while newspaper coverage of biological weapons in the 1980's was not nearly as intense as it was in the 1960's and 1970's, biothreats never fully left the public

[5] This source list is chosen in part to remain continuous with the narrative built in the prior chapter. However, as with before, these sources provide almost all of the available national newspaper coverage about the Rajneeshee poisoning.

conversation. The possible dangers of the secret labs in the Soviet Union and the consequences of emerging biotechnology in the field of genetics continued to appear in print as warrants for fearing future biological attacks. The spirit of paranoia was kept alive in sensational stories about these emerging technologies and remained sustained by the tense international relationship between the United States and the Soviet Union. A cynic might reasonably chalk up these paranoid stories as nothing other than common, journalistic fear-mongering. If this is so, why is it that the Rajneesh event was never characterized as a biological attack? Certainly that would have made for a sellable news story. More specifically, why was it never characterized as a biological attack by terrorists? Definitive answers to either question are not possible, but some hypotheses can be ruled out.

First, it must be conceded that the specific term bioterrorist is not yet in the popular lexicon for use in the *Oregonian* or the national press. The word did not appear in print in the *Oregonian* until October of 2001.[6] The contemporary, compressed label "bioterror" did not appear in national newspapers until 1997 when Richard Preston (author of the non-fiction bestseller about Ebola, *The Hot Zone*) used it on the Op-Ed page of the *New York Times* in an article called "Biology Gone Bad."[7] However, the phrase "biological terrorism" was used in national papers as early as 1979, in reference to the possibility of a biological agent being used in the conflict between the Palestinians and the Israelis.[8] Between 1979 and 1990 it was used infrequently.[9] Thus, trying to find an account of the Rajneeshee event that names it a bioterror

[6] "Siga's Sights on Smallpox Shield," *Oregonian*, October 13, 2001. The story details Oregon lab Siga Technologies work finding a smallpox vaccine as part of a "quest for products to fight bioterror."

[7] Richard Preston, "Biology Gone Bad," *New York Times*, November 7. 1997, A31.

[8] George F. Will, "Tracking Terror," *Washington Post*, August 9, 1979, A19.

[9] A search of Proquests general newspaper database as well as its fulltext historical archives of Los Angeles *Times*, *New York Times*, *Washington Post*, and the *Wall Street Journal* only finds one article between 1979 and 1990: Larry Thompson, "The Perils of Biological Warfare: Scientists Worry that Genetic Engineering could Create

attack would be asking too much, the term had not yet exploded into the popular imagination. However, two less demanding questions remain: why weren't the Rajneeshee recruited into the category of "terrorist" and why wasn't the salmonella used in the food poisoning recruited into the category of "biological weapon?"

Perhaps writers and editors at the *Oregonian* paid no attention to biological weapons? This turns out not to be the case. A search of *The Oregonian* for references to germ and biological warfare between the time of the salmonella outbreak and the time of Ma Anand Sheela's incarceration (1984 – 1986) yields thirty-one hits, none about the Rajneesh "attack."[10] This search of the *Oregonian* for the phrases "germ weapon," "germ war," "biological weapon," and "biological war" produces seven references to state-run biological warfare programs of the type offered at the end of Chapter 2. Four of the seven refer to the American program into Biological Weapons/Research, two of these are about future spending and the remaining two relate to exposés done by the Church of Scientology about biological weapons testing in the past. Two other stories make reference to the current Soviet threat and secrets revealed about the experiments done by the Japanese during WWII. Two stories use the terms "biological" and "germ" war more metaphorically, referring to environmental programs designed to fight mosquitos and unwanted, invasive plant species. The remaining twenty-two hits come from the Entertainment section: twenty-one listings for the 1971, Charlton Heston film *Omega Man* (in which a man battles mutants in the wake of a germ apocalypse caused by a biological war between China and Russia) and one review of the 1984-1985 television series *V* (in which humans use a bacteriological weapon against alien invaders). In short, the *Oregonian* did at least

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Worse Threats," *Washington Post*, January 24, 1989, A7. After 1990 the term becomes more popular and after 1997 it becomes ubiquitous for reasons explained below.

[10] This section relies on articles drawn from *Oregonian*'s news archive, a paid archive maintained by NewsBank (accessible at http://www.oregonlive.com/search/oregonian/).

occasionally write about biological/germ war in international political stories and used the terms in other, related contexts.

Perhaps the *Oregonian* did not write frequently about terrorism or, at least, did not understand the Rajneeshee to be terrorists? Surprisingly, the *Oregonian* did not frequently write about terrorism, but, when it did, the "terrorists" were often the Rajneesh. Between 1984 and 1986, the *Oregonian* published only six stories which made reference to terrorism. Three of these referred to events that happened in the Middle East (specifically the conflict between Israel and Palestine) and North Africa while the other three were explicitly stories about the Rajneeshee. Each of these is described in some detail below, but, to summarize: one described literature found at the Rajneeshee compound ("books describing ways to commit…acts of terrorism"), one described the Rajneeshee plan to rig an election as "political terrorism," and the third used the unique and peculiar label of "medical terrorism" to describe the practice (carried out by Sheela and Puja) of falsifying AIDS tests as a way to ostracize individuals from Rajneeshpuram. In sum, the *Oregonian* did occasionally understand the Rajneeshee as terrorists, yet the label was not used frequently in stories that featured the food poisoning and was only used once (ambiguously) as a name for the event. They are terrorists, but the poisonings are not the exemplary act that casts them as such within the *Oregonian*'s stories.

More broadly, prior to 1998 no national newspaper describes the Rajneeshee as terrorists nor labels their act of food poisoning as an act of terrorism. The label, insofar as it is attached to the group by the *Oregonian* does not carry to the national stage, at least not until it is reimagined and re-described in the late 1990's. Below, I follow the event through these stages: first, its construction in the *Oregonian* and its limited reception in the national presses; second, its re-emergence in the late 1990's. In this latter period, it will be helpful to consider not only

narratives by the major, public media but also narratives developed by experts of two types: scientific investigators and criminal investigators. Both are differently influential in bringing the Rajneeshee story to the national stage and using it to build biothreat narratives. These two different types of experts work both together and apart. As I show below, the association between science and criminology is one which gives legitimacy and value to certain kinds of scientific research, but at a cost. I will show below that Török et al.'s account of the "attack" offers an attempt to navigate the relationship between science and criminology that cedes important, interpretive ground to criminology. In Török et al. the price of this ceding seems low, but, as I show in Chapter 4, it has important and dramatic consequences for the scientist-suspects of the Amerithrax case, especially Bruce Ivins.

All of this shows, or at least lends credence to, the argument made in Chapter 2 that the descriptions and ascriptions of blame in these complex scenarios cannot be reduced to the material facts of the case. Further, as just explained, in this specific case it is not enough to say that 'no one talks that way yet.' Something about the events and their observers was insufficient to draw out the kind of overwhelmingly paranoid attitude that was on offer in the late 1960's and becomes on offer again in the late 1990's. Skepticism about this event's connection to a human cause was sustained and the skeptical narratives offered by epidemiologists remained dominant even after the paranoid narrative was offered and evidence in support of that paranoia seemed to emerge. Unfortunately for the paranoid, some states of affairs will not act as evidence in a self-evident manner. Those who are not paranoid may stubbornly refuse to grant the obviousness of paranoid claims, sometimes to an almost absurd degree. States of affairs must be interpreted and, in that interpretation, attitudes play a role.

3.1.1 Local Coverage

> A food poisoning outbreak centered here [in The Dalles] has struck more than 150 persons throughout Oregon in what public health officials believe may be one of the largest salmonella outbreaks in recent history…..Investigators believe salad bars at the restaurants may be the source of the contamination…
>
> Jeanie Senior *The Oregonian* 1984[11]

What later becomes an act of bioterrorism, starts like this: contaminated salad and 150 sick Oregonians. The first story on the outbreak was given almost half of the front page on September, 27 1984. Underneath a picture showing stacks of medical isolation bags filling a hospital hallway, the article told a story of both a public health crisis and a medical mystery. Three restaurants had been confirmed by the Wasco County Health Department as sources of the infection and "each of the three…made their own salad daily."[12] Beyond that, no link between the cases had yet been found. Even so, the story was immediately associated with other cases which seemed similar at the time: "there were reports of food poisoning outbreaks in Washington, but officials there could not confirm that."[13] Thus, the story was immediately put in the context of a possible multi-state health crisis with an unknown origin. This first connection to food contamination is impressively sticky and, as I show below, the salad bar itself remained an object of fear even after criminal investigators discover that the contamination in The Dalles was intentional. The paranoid attitude found an object of suspicion in this case, though it is a different object than one would suspect.

[11] Jeanie Senior, "150 Taken Ill by Food Poisoning," *Oregonian*, September 27, 1984, A1.
[12] *Ibid.*
[13] *Ibid.*

3.1.1.1 The largest epidemic "of its kind"

In explaining the medical aspects of the case, the initial *Oregonian* article pointed out that salmonella "is generally transmitted through contaminated food or water but can be transmitted through physical contact with persons who have not washed properly after using the restroom."[14] This last note points to an ambiguity in the narrative possibilities in "food poisoning." Food poisoning can result from several different scenarios. In some of these a human actor has done wrong (perhaps negligently) but in others the contamination simply seems to occur spontaneously or even naturally. Thus, when food poisoning and/or contamination work in the passive voice (I was poisoned), it remains unclear whether or not a helpful active construction is implied. If I am poisoned, must it be the case that someone poisoned me? Who is to blame? Is the food *just* contaminated or did *someone* contaminate the food? I do not mean to present these questions as empirical questions, but questions about how the narratives play out. Surely, no matter what the facts of the case turn out to be, I can tell a story in which someone gets blamed. The labels of "food poisoning" and "contamination" leave open the possibility that the problem was caused by a person who failed to wash his or her hands or some other, unnamed cause. The terms do not point the conversation in one way or the other. As signs of attitude, these labels are skeptical; they neither rule out nor rule in any ultimate cause.

A local investigation followed the cluster of food poisonings, and, although the hospitals did not initially report the outbreak because they thought the situation was "under control," investigators from the Centers for Disease Control as well as the Oregon Health Division were eventually sent "to aid in tracing the source of the illness."[15] Dr. Bruce Carlson assured the public, via the press, that the investigators were "trained in ferreting out this type of thing,

[14] *Ibid.*
[15] *Ibid.*

looking for a common source or common causes."[16] As I show below, it is this point that becomes at issue for epidemiologists when, in the end, they are unable to find the common source on their own. Their claim to the right kind of expertise falls flat, because while they can describe the shape of the outbreak, they are not able to come to a definitive conclusion about how the outbreak started. As Török et al. explain, there are limits to scientific investigations. In the meantime, the search for the source began in earnest.

As the number of cases quickly escalated, the chief possible sources that emerged in the early days of the outbreak were food workers and lettuce. On September 30th, as the reported cases more than doubled from 150 to 367, Laurence Foster[17], a representative of the Oregon Health Division, told an Associated Press reporter that, "Every little bit we do seems to support the idea that…food service workers may have been affected by an original source and (then) introduced (the infection) to their restaurants, from which it may have been transmitted."[18] Thus, the food workers were plausibly a cause, but only a proximate one. They contaminated the salad, but may have been contaminated themselves at some other locale. When questioned on the matter of "foul play," the Foster replied that, "[w]e have to consider that as a possibility…It doesn't seem likely now from the evidence we're starting to put together."[19] Given Foster's characterization so far, what sort of evidence would make it seem likely? The link to the food workers is not even necessarily an ascription of blame, unless that blame is just an accusation about improper hand washing.

[16] *Ibid.*
[17] Foster is a co-author on the Török et al *JAMA* article.
[18] "Salmonella Probe Evidence Points to Food Workers," *Oregonian*, September 30, 1984, A22. Both the ellipses and parentheses are in the original, the latter of which presumably act as a *sic*.
[19] *Ibid.*

Even within the context of a possibly accidental human cause, the disease investigators downplayed the amount of blame that could reasonably be placed on the food workers. As CDC epidemiologist Thomas Török told an *Oregonian* correspondent, "[t]his is a bacteria that we live with."[20] In the same article, the author explains that, "[i]n fact, salmonella is most commonly the culprit for classic food poisoning outbreaks…"[21] Unlike the unexplainably sick sheep in Skull Valley, we have a simple explanation that obviates the need for paranoia, and it is an appeal to the simplicity of the explanation which seems to act as the 'evidence' that Foster refers to above. Two pieces of evidence frequently repeated are that many food workers have become ill and the restaurants which made people sick use different salad distributors, but what do these facts purport to evince? Since food workers are sick, does this suggest that food workers brought the sickness with them or passed it along? Since the restaurants used different lettuce distributors, does this suggest that the lettuce can't be the original source? The facts alone nor together were sufficient to say whether the food workers (or anyone else) contaminated the salad purposefully, or which direction the contamination flowed between workers and salad. In fact, James Weaver (the paranoid voice in this drama) uses all of these facts as premises to support his conclusion that the epidemiologists are wrong. Here we see the beginning of a tension which will take decades to play out entirely – the epidemiologists claimed that the evidence shows what is and is not possible and plausible, and their 1997 article held to that story. However, the 1997 *JAMA* article by Török et al. also pointed out that species of possibility are only visible to experts of a certain sort. In such an account, the possibility of foul play may *never* seem likely to public health officials unless some work is done to adjust their attitudes.

[20] Török quoted in Jeanie Senior, "Health Sleuths Strive to Trace Food Poison," *Oregonian*, October 1, 1984, B1.
[21] *Ibid.*

Because of these complex ambiguities, explanations in 1984 for the outbreak often seem contradictory. An article on September 30th elaborates the ways in which food workers were the cause and rule out the possibility lettuce as the source, yet an article on October 2nd reversed this logic entirely with no discernible difference in the facts offered about the case.[22] Instead of explaining the problems of negligent hand-washers, the article explained that "salmonella could appear on lettuce if sewage were used for irrigation."[23] However, as with previous articles, the dirty lettuce story notes that the lettuce from the contaminated restaurants came from different areas. Thus, the structure of this explanation is no different from the previous ones. Contamination could happen this way, thus this mode is 'suspected' insofar as no other mode has been definitely demonstrated. The search for the best explanation continues. It is possible, therefore suspected in a delimited way (no farmers are being brought in for questioning or are asked for comment on accusations). Structurally, this is an echo of the same reasoning used to explain the deaths of the sheep in Utah (Dugway could have done it) and the Cows in Maryland (Detrick could have done it) but the force of the blame is almost nonexistent. In the cases of the cows and sheep, the accounts seemed to stick because they had simplicity to them, but what counted as simplicity then was constructed by the national awareness and conversation about biological weapons and the risks surrounding tests of them. The dead animals fit into a story, just as these food poisonings fit into a story about other food poisonings. The categories are equal parts fitting and arbitrary.

After intense investigation for many months, epidemiologists remained unable to give "a clear explanation of how so many food handlers and how so many restaurants became affected at

[22] Jeanie Senior, "Lettuce Suspected as a Source of Food Poisoning," *Oregonian*, October 2, 1984, B4.
[23] *Ibid.*

approximately the same time."[24] Thus, as Foster explained, "[i]t is reasonable to believe" some connection and he hypothesized the existence of a, "low level salmonella infection" preexistent in the community.[25] Foster was, by his own description, providing an explanation of the evidence not an explanation from the evidence. There was no specific reason to believe that there was a prior infection, only that a prior, occult infection was possible (how would one rule that out?) and would be sufficient to explain the outbreak. So, the investigation continued: "researchers [tested] plasmids" to see if the victims were infected by related bacteria, and carried out "a special study of what happens to the temperature of foods in salad bars."[26] In the meantime, Foster said that the outbreak as a whole showed that Oregon needed "hygiene training and certification of food handlers."[27] Here, we see how definitions give rise to responses – since the food handlers could have done it, we should change the practices of the food handlers. Further, we see how an ambiguous situation gives rise to a response that could never have prevented that situation – washed hands would not have prevented the outbreak, though perhaps surveillance of the salad bar or repeated changing of some food component might have. Throughout the first half of 1985, stories about the poisonings continued – stories that linked the outbreak to a larger pattern of outbreaks and a possibly serious problem with food workers in the area.[28] With the public health investigation turning up no new evidence, the stories about the outbreak seemed to have limited potential for growth in any other direction.

At the same time, there was also a series of ironic events in the local coverage of the food poisoning outbreak. On February 28th, Congressman James Weaver delivered a lengthy speech –

[24] Foster, quoted in Jeanie Senior, "Probers Still Seek Food Poison Cause," *Oregonian*, November 27, 1984, B3.
[25] *Ibid.*
[26] *Ibid.*
[27] *Ibid.*
[28] See, for instance "New Poisonings Bring Closure," *Oregonian*, February 27, 1985, B3; "Suits allege negligence in food poisonings," *Oregonian*, May 22, 1985, C4.

a speech not mentioned in *The Oregonian* or any national paper for 20 days - on the floor of the US House of Representatives. In the speech Weaver explained in some detail the scope and timeline of the outbreak, as well as the ensuing investigation. However, the facts of the case seemed to him to rule out the kinds of explanations that Foster provided. Salmonella had formerly been rare in The Dalles; how could such an outbreak strike so many salad bars that had nothing in common save geography? Weaver had a hypothesis: "I came to the conclusion that the town had been poisoned."[29] Weaver made plain that his hypothesis was only that, because "[t]here is no direct, concrete evidence of deliberate sabotage."[30] In his compliments to epidemiologists he attempted to explain the limits of their ability in generating such evidence, saying "[i]t is not the job of the health authorities to postulate answers from circumstantial evidence."[31] However, Foster's claims about hand-washing and latent infections seemed to prove otherwise. The problem was not the postulation of answers, but the postulation of answers that include a crime – a crime that Weaver explained to be not only possible, but plausible if we considered the account as he tells it. In Weaver's view, an intentional cause was obvious. Before naming his suspect, he explained:

> Is there a madman lurking in The Dalles? The poisoning was an insane act, an act of violent hatred, carried on with subtle means. There must be such a person or persons with the motive and ability to assault this town, for it actually happened.

This short statement not only exemplifies the paranoid attitude, but it also dramatically bridges Nixon's imagined bioweaponeer with the language that will emerge in 2001 about the anthrax bioterrorist. Is there a madman? If someone has used salmonella as a weapon, then there is, by definition, such a person. Since Weaver showed that it is plausible, even as health officials

[29] Weaver, "The Town That Was Poisoned."
[30] *Ibid.*
[31] *Ibid.*

suggest otherwise, he concluded that it was certain. Weaver's strong language seems dramatic in the context of the accounts in 1984 and 1985, but as I show below it seems appropriate in relation to the accounts developed after 1997, accounts that understand the outbreak as the first bioterror attack. The madman Weaver had in mind (who, within accepted histories of the event was arguably not the mastermind of the poisonings) was Bhagwan Shree Rajneesh.

Weaver went on to explain the various difficulties that the local Oregonians had with the Rajneeshees: conflicts about building codes, recruitment of "street people" to the group, threats directly from the mouth of Ma Anand Sheela, etc.[32] In particular, Weaver called attention to the repeated claims by both Ma Anand Sheela and Swami Kishna Deva (the man who will later testify against Sheela) that Wasco County is bigoted against the Rajneeshee and the Rajneeshee will need to fight back. Further, "The Rajneesh Medical Corporation has a well-equipped medical laboratory at Rajneeshpuram."[33] They have the means and they have the motive, as Weaver sees it. Finally, Weaver reads an account also not covered in *The Oregonian*: the story of a Judge (William Hulse) and a county commisioner who, after drinking water provided to them by a Rajneeshee, became ill. Hulse was hospitalized and was told by doctors that "he might have died." Weaver ends his speech with a call for a "police investigation of the salmonella outbreak." It was not Weaver's calls that brought the criminal investigation, however. Ironically, the local voice that would bring federal authorities to Rajneeshpuram was neither Weaver nor Hulse, but Bhagwan Shree Rajneesh.

Weaver's accusations appeared in *The Oregonian* almost three weeks after the speech, but only in brief, in an account of several Rajneesh officials who "[accused] Weaver of linking Rajneeshees, in comments he made on the floor of the House a few weeks ago, with a salmonella

[32] *Ibid.*
[33] *Ibid.*

food poisoning outbreak in The Dalles last year."[34] The author of the article helpfully reminded the reader both of the details of the outbreak as well as the fact that, "[t]he Health Division specifically ruled out deliberate contamination of the food source."[35] Even though the Rajneesh had frequently been in *The Oregonian* in stories alongside of the food poisoning outbreak (often stories about the Rajneesh encircle a story about the food poisoning), March 20th, 1985 marked the first time that the Rajneesh and the outbreak appeared within the same narrative. Many aspects of Weaver's account were eventually supported by the testimony of various cult members (especially Krisna Deva) who turned on Ma Anand Sheela and Puja, yet some of his paranoid conspiracy falls flat. In the end, the details of Weaver's accusations are not obviously important nor is his particular paranoia a major driver for the change in the outbreak narrative.[36] His story simply failed to persuade.

3.1.1.2 Madmen and terrorists

In September of 1985, the food poisoning story began to undergo its first reshaping. Even though the account of the outbreak eventually converged with Weaver's story of a 'madman,' it was in fact the 'madman' of Weaver's story that steered investigators toward the discovery of the intentional contaminators of The Dalles' salad bars. Though he had been generally silent for years – especially to the press – Bhagwan Shree Rajneesh opened up to the press and made a rapid series of statements about his secretary Ma Anand Sheela immediately after she left the compound to visit Germany.[37] In his statements, Rajneesh made a host of accusations against Sheela, including that she had wiretapped Rajneesh's phone and later

[34] Jeanie Senior, "Weaver Aides Greeted by Rajneeshee Hostility," *Oregonian*, March 20, 1985, B5.
[35] *Ibid.*
[36] Weaver himself faded into political obscurity. Like Rep. Richard McCarthy, Weaver ended his political career after a failed attempt to win a Senate seat.
[37] Robert Ulrich, "Sheela Calls Charge Nonsense," *Oregonian*, September 25, 1985, A1.

attempted to murder Rajneesh, his doctor, as well as one of his close friends. Finally, Rajneesh claimed that Sheela was the secret mastermind of The Dalles salmonella outbreak. Unlike Weaver's statements – which by his own admission were without evidence – Rajneesh's accusations came from personal knowledge of the events, even as he was both not the one who ordered them and was powerless to stop them. A picture emerged in which the 'real' madman of Rajneeshpuram was not Rajneesh, but Sheela.

In the short piece about the accusations, the food poisoning story had its first of three encounters with "terrorism." Among the things the story claimed that Sheela would have to account for were, "books describing ways to commit undetected murders and acts of terrorism," that Rajneeshee officials claim to have found in Sheela's room.[38] Sheela was not yet a terrorist, though she possessed materials with a double nature. Predictably, Sheela's refutation of these charges was perfectly Nixonian – she explained that "the books were studied by commune leaders when there were threats on Rajneesh's life."[39] There is always a second, defensive reason to be concerned with weapons of terror; The rhetoric of defense allows for (and even requires) this kind of thinking, but only justifies it for the State. As I show below, this line of thinking was contested by other Rajneeshee and, ultimately, Sheela stops invoking it. In the wake of Rajneesh's accusations, a task force was formed and a series of investigations began in Rajneeshpuram. Among the discoveries made by the FBI and local investigators was the existence of what seemed to be a "clandestine laboratory" in an "abandoned building."[40] Though the buildings use was not yet "scientifically" confirmed, Prem Hasya (Rajneesh's new

[38] *Ibid.*
[39] *Ibid.*
[40] James Long and Leslie L Zaitz, "Lab Reputedly Used in Germ Experiments," *Oregonian*, September 29, 1985, A1.

secretary, Sheela's replacement) described the workshop as the site for "germ warfare" experiments.[41] Finally, the article reports:

> [n]o evidence has been found to link Rajneeshees to [the] outbreak of salmonella in The Dalles last year althrough Rajneesh Medical Corp. did buy two batches of an apparently different salmonella strain from a laboratory supply company. Investigators have concluded that the salmonella specimens were normal paraphernalia for the medical corporation's microbiological laboratory.[42]

Just like the commentary on Weaver's accusations, the hypothetical link between the Rajneeshees and the outbreak is firmly denied and skepticism about a human cause is sustained. Whereas in the 1960's this sort of absence of evidence would be converted into "uncertain proof" of a threat, here it is treated as a complete coincidence.

Even in the face of an accusation by another Rajneeshee, the presence of salmonella was explained away as perfectly reasonable and non-suspicious to the investigators. Perhaps the accusation itself is suspect (because of its source from within the cult), nullifying any need for further suspicion. Understood this way, paranoia may be unattractive when it is difficult to identify with the paranoid. Why Weaver failed to pull such identification remains a puzzle (he is, after all, literally the Oregonians' representative). Still, as I show below, it is primarily on the basis of further Rajneeshee testimony that the case pressed forward. The important point here is not that the journalists missed evidence in front of them or maintained a healthy degree of journalistic skepticism or objectivity. If there is a normative lesson here, that lesson is not obvious. Instead, what is clear here is that in this case – indeed the supposed foundational case in the history of US bioterror – we discover an outbreak which was cleaned up without public health officials knowing it was human-made and was treated in the press with extreme

[41] Quoted in *Ibid.*

[42] *Ibid.*, These samples were of *Salmonella typhimurium*, the bacteria that causes typhoid. In all likelihood it was from these cultures that the poisoned water given to Judge Hulse was made.

skepticism - even as the eventual guilty parties remained suspects in accounts by criminal investigators. As the national coverage below highlights, there were sensationalist elements to the story, but they were slow to manifest and did not manifest concretely under the umbrella of terror, even as terror is invoked. In this case, a skeptical attitude emerged and was sustained in spite of both testimony and apparent evidence against it. Later, when the skeptic is shown to have missed this proper accounting of things, it seems like a great puzzle how so many could be so mistaken. Yet, most contemporary accounts of the case downplay the puzzle exists at all. Sheela was a terrorist and little is said about how long it took to call her one.

Two other *Oregonian* stories make direct connections between terrorism and Sheela, the food poisoning suspect. Above, she was merely associated with terrorist materials, but she and her activities are twice given more descriptive labels. While Sheela and her associates fight extradition from Germany, stories about their suspected crimes and the investigations related to them continued to circulate in *The Oregonian*. Among the accusations made against Sheela was the claim that she knew about and participated in "medical terrorism" within the Rajneeshee community.[43] This 'terrorism' was unrelated to the food poisoning and, instead, referred to the practice of drugging other Rajneeshee under false pretenses. For instance, Sheela was said to have ordered certain individuals to be given false diagnoses for diseases like AIDS, such that they could be isolated and secretly poisoned to death. Haysa, the new secretary to Rajneesh, suggested that this was done to get rid of people who "knew too much."[44] This story made no reference to the food poisoning, though it did mention that Sheela was under suspicion for attempted murder and wiretapping – the charges set against her by Rajneesh which, eventually,

[43] Unnamed Rajneeshee source quoted in James Long and Leslie L. Zaitz, "Druggings Reported at Ranch," *Oregonian*, October 20, 1985, A1.
[44] Hasya, Prem quoted in *Ibid.*

were used to justify her extradition from West Germany. In what specific way these actions constitute terrorism is unclear, but the narrative created by the Rajneeshee about Sheela suggests that she engaged in something like 'a reign of terror,' in which people feared the insidious power she wielded over the group. Later accounts (below) generally followed this form.

The third association with "terror" came almost a year later in an article that provided an account of Sheela entering a guilty plea. Here, on a page featuring three stories, all of which were about Sheela, she was described as, "the arch villain of a carefully crafted campaign of political terrorism – a planned assault not only on the state's land-use and election laws but also the people of Wasco County."[45] Now, with Sheela finally taking on the mantle of guilt, the story of the Rajneeshee salad bar poisoning could be told with total certainty. According to the US Attorney, it was an elaborate plot to, "make potential voters sick so that they could not vote on election day."[46] As part of this campaign of political terror, she was charged with having created a "dirty tricks squad" that set fire to the Wasco County Planning Department in order to destroy land-use documents, poisoned Judge Hulse and County Commissioner Ray Matthew, and even plotted to kill several US Attorneys. Additionally, she pled guilty to attempted murder of Rajneesh's personal doctor. Thus, her political struggle was both inward and outward. Her actions are understood as simultaneously a plot to gain a stable foothold for the Rajneeshee in Oregon and a position for herself at the group's head, a group she led through "tyrannical rule."[47]

This collection of three, disparate stories mark the only links between Sheela and terrorism during the 1980's. In sum, Sheela was accused of being interested in the acts of terrorists and being engaged in two related campaigns of terror – one medical and one political.

[45] Scotta Callister and Leslie L. Zaitz, "Sheela, Once a Roaring, Snarling Tigress, Docile, Tamed by Courts," *Oregonian*, July 23, 1986, B3.
[46] Baron Sheldahl, quoted in *Ibid.*
[47] *Ibid.*

The latter of these campaigns included the outbreak as the component, but whether we should understand it as terrorism because of its relation to politics or because of its actual creation of an environment of fear in either The Dalles or in Rajneeshpuram is unclear. Since the outbreak was particularly directed at affecting the political dynamic in Wasco County, it seems in one way quite reasonable to think of the outbreak as terrorism. However, since the act was done specifically in secret, it seems to fail as an act of *coercion*. That is, even if the outbreak created a culture of fear within The Dalles, the fear and the hopeful political end (rigging the election) are unrelated. In this way, the crime seems more akin to electioneering. Since the major, criminal charges laid against Sheela were arson, attempted murder, and wiretapping, none of the terrorist labels need to be further elaborated by the US Attorneys, nor did *The Oregonian* shift the language associated with the event. Even after it became accepted knowledge that the cause of the 1984 outbreak was not negligent food workers but a 'germ weapon' used as part of a 'campaign of political terrorism,' the outbreak continued to be referred to as "food poisoning." Perhaps because the conspiracy was already rooted out, there was no further urge to point to it in the press.

Even though the event and its major actor, Sheela, were briefly made sensational by the extradition and trial, both were immediately tamed and soon forgotten. While it might seem that the skeptical attitude was shown to have been poorly equipped to find the cause of the outbreak, it seems to have been quite effective in keeping the story from becoming overly sensational. In a story about her departure to federal prison, she was described as being guilty of "engineering…[an] outbreak."[48] As part of her sentence, she was given credit for time served and was made eligible for parole, though her parole would require her to leave the United States.

[48] Joan Laatz, "Sheela, 2 Cohorts Depart for Prison," *Oregonian*, July 26, 1986, C1.

US Marshals transporting her called her "congenial" and described all the Rajneeshee as "model prisoners."[49] Her lawyer reported that Sheela was looking forward to "getting on with her life."[50] The story was dwarfed by a photo of Sheela, head down, walking in handcuffs under guard by federal marshals. In the wake of the trial, stories about the Rajneeshees continued to circulate in *The Oregonian*. As part of the action against the group - specifically racketeering charges against several incorporated, Rajneeshee entities - a relief fund was set up to help victims of the Rajneeshee crimes, especially those "poisoned during [the] 1984 salmonella outbreak."[51] In sum, the response to Sheela's crimes was atypical to the way in which we might imagine the 21st century response to terrorism playing out. Light sentences in a medium security facility with the possibility of parole. The use of a relief fund using Rajneeshee money to help victims makes the case seem more like a case of corporate negligence or an environmental disaster than a terror attack, though it bears some resemblance to the government assistance offered to families affected by 9/11.

The local coverage of the salmonella outbreak moved, generally, through three stages. First (September, 1984 to September, 1985), the event was covered as an outbreak of food poisoning with no known cause, though food worker negligence remains the most likely cause hypothesized by public health investigators. Second (September, 1985 to July, 1986), the event moves into a transitional space in which it was associated with the Rajneeshee directly but was not yet definitively linked to the group by criminal investigators. Finally (after July, 1986), Sheela and others entered guilty pleas to a host of crimes and it is finally taken as a matter of fact that the salmonella outbreak was caused by Sheela and her 'dirty tricks squad.' Through all of

[49] *Ibid.*
[50] Stephen Houze, quoted in *Ibid.*
[51] Joan Laatz, "505 file claims in Rajneeshee poisoning scheme," *Oregonian*, December 2, 1986, B2.

these stages, the labels that dominated the local coverage were "outbreak," "food poisoning," and "contamination." Occasionally, the outbreak was said to have been "engineered," the food poisoning was taken to be in the active voice, and the contamination was understood to have been "intentional." While the Rajneeshee who turn Sheela in claim that she oversaw a "germ weapon" lab and engaged in "terrorism," the local coverage of the event fell just short of equating the engineering of an outbreak with germ terrorism. The language to describe the event this way seems available insofar as the labels exist in the conversations, but the journalists at *The Oregonian* avoid reusing the "germ weapon" and "terrorism" labels suggested by the Rajneeshee who turned state's evidence and provided anonymous comments on the record. Thus, in 1986, the salmonella outbreak was the bioterror attack that never was, and Sheela, the bioterrorist who never was, served 29 months in jail before being released. Weaver's "madman" never materialized. Though the paranoid narrative was vindicated (and becomes history), the terms of the paranoid did not circulate with the story. Instead, the Oregon court received a "tamed" suspect turned "model prisoner." Almost none of this captured the imagination of the national newspapers during the 1980's. In what follows, I describe briefly the aspects of the case which did appear in the national press. The fleeting associations between the outbreak and germ warfare or terrorism made no appearances in any of the forums surveyed: *The Washington Post, The New York Times, The Los Angeles Times,* and *The Wall Street Journal*. Below, I show how the event appeared in those papers before considering how the event re-emerged in the 1990's.

3.1.2 National Coverage[52]

Since the salmonella outbreak was understood at first as nothing more than the results of negligent food workers in rural Oregon, it is not at all surprising that the story received relatively little national attention. Prior to Sheela's departure to Europe and Rajneesh's subsequent accusations about her various crimes, only one article about the outbreak appeared in the four surveyed papers. The article described the search for, "the cause of an outbreak of food poisoning that affected nearly 700 restaurant patrons."[53] Lawrence Foster, quoted in the *New York Times* just as he was quoted in the *Oregonian*, explained the "leading hypothesis" for a cause as, "ill food handlers who may have contaminated the raw salad bar items."[54] Though it seems stated seriously, Foster was additionally quoted as saying that the outbreak would be, "one of the major outbreaks nationwide."[55] While this may be true, one would not know it based on the amount of national media attention it received, perhaps because, as Foster told the *New York Times*, "the outbreak appears to be over."[56] So, whereas this first stage of the outbreak lasted a full year in *The Oregonian*, it lasted only one article in the *New York Times*. The outbreak and the investigation began and ended in one short article. No similar articles emerged in any of the other papers surveyed.

When the story emerges again in the national press, it was shaped primarily by Rajneesh and his statements to the press. Indeed, of the seven articles which make reference to the

[52] This section contains a summary of all the stories published between 1984 and 1987 from the Proquest archives of Washington *Post*, *New York Times*, *LA Times*, and the *Wall Street Journal* which contained some combination of the keywords "salmonella" and either "The Dallas," "Wasco," or "Oregon." As explained in earlier Chapters, these papers were chosen both for continuity with previous selections and because they offered a high number of artifacts meeting the needed criteria.

[53] "Ill Handlers Suspected in Oregon Food Poisonings," *New York Times*, October 21, 1985, 33.

[54] Foster, quoted. in *Ibid.*

[55] Foster, quoted in *Ibid.*

[56] Foster, quoted in *Ibid.*

outbreak in 1986, five of them described the event and the major actors in relation to the "Guru." In the *Los Angeles Times*, the story made the front page with the doubly-titled "Bhagwan Blames 'Fascist Gang': Guru Revels in Revelation of a 'Paradise' Defiled."[57] The sprawling story, broken across four different pages, detailed a complex struggle within the Rajneeshee community in which Sheela was set on taking power by way of murder and embezzlement. The article presented Rajneesh's charges as largely baseless and that he, "didn't have much on Sheela and the others in the way of tangible goods."[58] It detailed Rajneesh's own legal trouble as well as his "fondness for Rolls Royces," "free-wheeling attitudes about sex," and "outrageous statements about conventional religion."[59] It was not a story about a town under siege by a political terrorist, but a story about a peculiar cult with a colorful, untrustworthy leader who had exasperated his Oregonian neighbors. Within the long article, one paragraph explained a possible link between Rajneesh's accusations and "salmonella poisoning in the town of The Dalles."[60] The poisoning case was not otherwise described.

On the same day, the *New York Times* provided similar, albeit shorter, coverage of the story.[61] This article similarly detailed the controversial cult as well as the peculiarities of its figurehead, Rajneesh. Again, the number of Rolls Royces he owns was given and his attitudes in relation to free love were explained. The outbreak was again mentioned, along with Weaver's suspicions, but so was the general skepticism about the veracity of any of Rajneesh's charges. The article mentioned the fact that Sheela was quite disliked in the community and therefore

[57] Peter H. King, "Bhagwan Blames Fascist Gang," *Los Angeles Times*, September 22, 1985, A1.
[58] *Ibid.*
[59] *Ibid.*
[60] *Ibid.*
[61] Douglas Martin, "Guru's Commune Roiled as Key Leader Departs," *New York Times*, September 22, 1985, 26.

made an excellent scapegoat for the various problems within the commune and between the commune and the local government. The article concluded colorfully:

> But things seem to be getting back to normal. Wearing the required colors, pale tangerine to deep purple, couples bounced in the disco into last night, and today the guru, flanked by two machine-gun toting guards, shared his revelations with his followers for two hours.
>
> Later he took a spin in one of his Rolls Royces, a security helicopter overhead.[62]

This, then, was what passed as normal within the commune, and this 'normality' was what caught and focused the attention of journalists outside Oregon. The poisoning story was but one small facet of the drama at Rajneeshpuram.

In the few other stories that followed, the events at Rajneeshpuram were framed from the point of view of Rajneesh, with one exception. In October, 1985, the *Washington Post* published a detailed and comprehensive list of the accusations facing Sheela and her co-conspirators, but, since the accusations at that time were only accusations made by Rajneesh, the article was titled, framed, and written as a series of statements and reactions made by him.[63] That Rajneesh alleged Sheela to be guilty of, "causing a salmonella outbreak," was given two sentences of page space. The story was about Rajneesh's attempt to position himself above and beyond a scandal that he, at worst, seemed to be manufacturing or, at best, feeding to the media for purely self-interested reasons. Since Sheela remained in West Germany, the story came to a full stop in the national press. There were no new developments for some time.

In April of 1986, the *Post* ran a story about Sheela's indictment for the outbreak.[64] In a strange reversal of format, the article focused almost exclusively on the outbreak, providing far more detail than all the *Post*'s previous coverage. Dates of the outbreak, an estimate of those

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[62] *Ibid.*

[63] Mary Thornton, "Oregon Guru Disavows Rajneeshsim, Vows to Survive Investigations," *Washington Post-Times Herald*, October 20, 1985, 7.

[64] Marjorie Hyer, "World of Religion," *Washington Post-Times Herald*, April 5, 1986, C1.

effected, and even the purported political motive (of affecting the election) were explained. Rajneesh was, however, still the anchor of the story. The article helpfully updated the reader about the recent sale of several of Rajneesh's Rolls Royce collection and provided added details about the expensive paint-jobs common to the cars in Rajneesh's fleet. The article had no title and was collected into the "World of Religion" section along with a story about a controversy about religious leaders lobbying for the sanctuary of illegal aliens in New Mexico, a court case challenging the legality of Reagan sending ambassadors to the Vatican, the development of a new Methodist hymn book, and the appointment of a new Rabbi at the temple of Beth Shalom in Columbia, MD. It was an article engaged in a struggle for its identity: a story from the world of religion about food poisoning and expensive cars.

The outbreak re-emerged twice in the national spotlight, first when Sheela and her co-conspirators entered their guilty pleas. Both the *Los Angeles Times* and the *New York Times* published similar articles which provide summations of the case. Both identified Sheela as the major character in the drama, but, unlike coverage in the *Oregonian* where Sheela was a known quantity, both papers name her as an "aide" to the "Guru."[65] The *Los Angeles Times* listed her crimes as, "attempted murder, electronic eavesdropping, immigration fraud and engineering a salmonella outbreak that sickened more than 750 people." The details of Sheela's sentence are somewhat confusing and are not well explained in the press. She was given a series of concurrent sentences by both Federal and State courts, but then had several of them suspended in exchange for heavy fines and surrendering her Visa.[66] In the end, "[p]rosecutors said…that

[65] "Former Aides to Guru in Oregon Plead Guilty to Numerous Crimes," *New York Times*, July 23, 1986, B9; "Ex-Aide to Indian Guru Pleads Guilty to Charges," *Los Angeles Times*, July 23, 1986, A17.

[66] This is especially confusing given what happens later – Sheela is given early release on the condition of leaving the country, much to the frustration of Oregon officials who hoped to charge her with other crimes in order to keep her in jail.

Sheela would be in Prison only about 4 ½ years."[67] As explained above, she actually served 29 months. As with the papers' coverage of the outbreak itself, these articles were stories about closure; they were endings to a drama that had already played out elsewhere. Thus, they summarized Sheela's life, her struggle for power at the commune, and the charges set against her by Rajneesh. The articles included the outbreak, but they are not substantially about the outbreak. It was one charge among many and received no more than a sentence in each article.

Amazingly the sale of the 64,000 acre ranch, renamed Rajneeshpuram after the Rajneeshee moved in, received more column inches in the *Los Angeles Times* than the trials had. Russell Chandler, religion writer for *Los Angeles Times* who wrote frequently about the Rajneesh during the 1980's, provided a detailed retrospective on the Rajneeshee and their impact on Oregon.[68] Chandler detailed the location of the ranch and how Rajneesh used it as a "magnet" for his followers across the world who made pilgrimages to the site during the 1980's. Chandler's story was perhaps the most dramatic in this series of 'closure' stories: the outbreak, the trial, and now the ranch. The article evoked a series of metaphors, describing the site as "Paradise Long Lost," and a "Bad Dream" (the latter of which comes from a quoted Oregonian Postmaster). However, as the story put it, the dream of the Rajneeshee was not so easily woken up from. The massive relief fund was still paying out claims and lawsuits were still pending against the Rajneeshee's incorporated entity (Rajneesh Inc.). Further, many of Rajneeshpuram's portable buildings had been moved to a similar, rural ranch in Montana called Paradise Valley where another new age religious group called the Church Universal and Triumphant was making

[67] "Ex-Aide to Guru."

[68] Russell Chandler,"Rajneeshpuram – Nature Reclaims Commune of Paradise Long Lost," *Los Angeles Times*, April 25, 1987, A5. The article is picked up by *Washington Post* and re-run in their religion section as "Sect Recalled as a 'Bad Dream,'" *Washington Post-Times Herald* June 27, 1986, D12. Since the story is re-run with no details changed, it has the peculiar effect of re-articulating the end of the story.

use of them. Chandler explains that, "[s]ome are concerned that [the church] might be able to control the Paradise Valley the same way that Rajneesh took over Antelope and tried to control Wasco County."[69] So, again, the story of Rajneesh is made to be one about a strange cult spreading to quiet corners of America. These groups are peculiar and should give the reader pause, but it is certainly not clear that the reader should have thought of them as terrorists.

3.1.3 One Event, Many Stories

As it appeared in national papers, the salmonella outbreak in The Dalles was noteworthy in only the most literal sense – it was worthy enough to receive an occasional note. As a human-made outbreak, it was given very little space and never worked as the featured or central event in the dramas of Rajneesh and Sheela. It was one charge among many against a woman who seemed remarkable primarily because of her association with a Guru who possessed many cars. Thus, the story that appeared in the national newspapers was, in many ways, not the same story that appeared in the *Oregonian*. Further, the story in the *Oregonian* was not really a story about a food poisoning outbreak. In the *Oregonian*, there were stories about the food poisoning outbreak and then there were stories about the collapse of the Rajneeshee commune. The former was a feature within the stories about the latter, but the latter was both the figure and the ground. The outbreak was an important feature in the story about Sheela's downfall, but the outbreak itself was far away and less tangible than the charges of attempted murder and wiretapping (the crimes which drew the attention of the FBI and were the basis for the Federal charges that Sheela pled guilty to). Pulled even farther from its center in Oregon, the story lost its geographical and

[69] *Ibid.*

chronological frames. The outbreak emerged in the national presses after it had been resolved, thus there was no ambiguous event for an attitude (be it skeptical or paranoid) to interpret. The story of the Rajneeshee appeared at the height of its sensationalism, but long after the Rajneeshee had caused the bulk of their damage to Wasco County. It was a story about a peculiar guru and the drama of his strange followers, not Weaver's lurking biological mystery. The outbreak was an interesting detail that never became interesting in its own right, never pulled into the narrative about the danger of biological weapons. Instead, it became part of a growing body of evidence about the dangers of salad bars. Even though the language seemed available to describe the event as a germ attack by terrorists, such a story never emerged. The worries about biological weapons, detailed in the final sections of Chapter 2, remained focused on cutting edge biotechnology and the terrible work being done behind the Iron Curtain. In the 1980's, the outbreak demonstrated the existence of a threat, but it was the threat posed by the invasion of new age cults and poorly maintained salad bars.[70]

The coverage shown above demonstrates the immense ambiguity in the materials and actions that are later taken to be so obviously demonstrative of bioterrorism. The particulars of an event underdetermine the label applied to it. In the case of the salmonella outbreak in The Dalles, the press only learned of the event after local hospitals decided that the problem could not be controlled within the clinic. We might imagine that there is some moment in which a chief of medicine called an epidemiologist like Foster and the event is then determined to be a public health issue, an outbreak, and not some kind of an attack. Yet, Weaver's testimony on the floor of the House of Representatives suggests that the epidemiologists' version of the story does

[70] For such a cautionary tale, see Marian Burros, "The Salad Bar: A Boom in the Movable Feast," *New York Times*, August 13, 1986, C1. It mentions the outbreak as a reason to worry about how sanitary salad bars are. This is the only article to do this in the national papers surveyed.

not crowd out all helpful perspectives. The paranoid attitude remains available so long as the facts of the matter can be understood as ambiguous (i.e. so long as the skeptical attitude is available as well). In fact, Weaver explained why he need not disagree with the public health officials at all. When proof is uncertain, science cannot help. When science cannot help, scientists are the wrong investigators to have on hand. Weaver calls specifically for a *criminal* investigation. We need the right kind of experts on the case. When these experts move in, justice is swift. Rajneeshee are turned against one another; suspects are extradited; sentences are doled out (and briefly served). The bad dream ends. As I show above, what actually happened was much messier than this.

Yet, when the experts who, in that sense, 'failed' Wasco County came forward in the 1990's, they provided an account of the outbreak which diverged from what was already said. In the national accounts above, the outbreak, was presented as over, resolved, and a distant memory. It was relevant as a retrospective, a part of the past. However, Török and his co-authors understood the event as being part of a situation that was not only not at all over, but more important than ever. In doing so, they attempted to explain both the power and the limits of their scientific investigation. They echoed Weaver's articulation of the relationship between criminal and scientific investigators, even as they seem forgetful (or ignorant) of Weaver having ever articulated it. As a consequence, any beneficial work done by the skeptical attitude is hidden. Skepticism is devalued as part of the narrative negotiation of the outbreak. In what follows, I demonstrate how the 1984 Rajneesh food poisoning, the engineered outbreak, the intentional contamination, is remade into an act of bioterror and I speculate about some of the possible consequences this remaking has for the effectiveness of the skeptical attitude.

3.2 THE RAJNEESH BIOTERROR ATTACK

> Outbreaks of foodborne infection are caused by foods that are intrinsically contaminated or that become contaminated during harvest, processing, or preparation. It is generally assumed that such contamination events occur inadvertently; intentional contamination with a biologic agent is rarely suspected or reported.
>
> Thomas Török et al. 1997[71]

As shown above, immediately after the outbreak, local and national public health investigators came to The Dalles in an attempt to both help manage and locate the source of the outbreak. There were, in the community, those who held suspicions that the Rajneeshee might have been the cause of the outbreak. In retrospect these suspicions seem justified because the Rajneeshee may have poisoned before and were engaged in a political struggle with the County. However, to Foster and his colleagues, there was no evidence for an intentional contamination and, instead, the evidence seemed more consistent with some other explanation (negligent food workers, a latent epidemic in the community, etc). Much later, after the outbreak was under control and new safety rules had been put in place, federal criminal investigators executing a search warrant tied to unrelated crimes discovered an abandoned laboratory reportedly used by Sheela and her allies in the cult as a 'germ lab.' At the time, the evidence was treated as ambiguous and not necessarily proof of anything like 'foul play.' The investigation did, however, turn up conclusive evidence of other crimes, specifically wiretapping and immigration fraud. By charging some Rajneeshees with these crimes, investigators extracted interviews damning enough to motivate Sheela and others to plead guilty to a host of crimes, including causing the outbreak.

[71] Török et al, "A Large Community Outbreak."

In this account of things, scientific investigators were part of the investigation that linked the Rajneeshees to the outbreak, but not in a way in which their scientific expertise helpfully connected the two. In fact, it seems as if scientists and their skeptical attitude more often severed the link between the two by explaining away the *Salmonella* found at the commune and providing alternate hypotheses for the outbreak that were more consistent with the evidence. Forensically, the link was imperfect. Thus, if the germ lab functioned as evidence then it was inconclusive and circumstantial. However, since the scientists did not write up and publish the case during the 1980's, there is no total, public account of it from their point of view. Below, I show how the outbreak became of new interest in the 1990's and is reimagined by both scientific investigators and biosecurity experts. To do this, I consider two major sources: the 1997 *JAMA* article published by Török et al and a working paper on bioterrorism written by W. Seth Carus, a researcher at the National Defense University (NDU). These two sources are at the center of this analysis for several reasons. First, accounts of the outbreak as a bioterror case almost always lead back to these authors. Since Török and Foster were actually part of the investigation detailed in the *Oregonian* (indeed, both are quoted by *Oregonian* journalists and I reproduce some of those quotes above), they act as a helpful bridge between the 1980's and the 1990's. Since so little was reported about the outbreak in the 1980's, journalists and researchers interested in the case must either go to sources like the *Oregonian* or the sources for those stories, the remaining Rajneeshees and those who investigated them. When W. Seth Carus wrote his working paper on bioterrorism and biocrimes for the NDU, he does both. Most writing after Carus take his account to be definitive. In turn, he takes Török et al. to have provided the definitive epidemiological account. For example, *Germs: Biological Weapons and America's Secret War* (a Simon & Schuster published, Non-Fiction Best Seller), begins with a narrative

account of the outbreak which (according to the notes) relies largely on interviews with and readings of Carus and Török.[72] Similarly, when Francisco Galamas mentions the outbreak in his "Profiling Bioterrorism," his footnote directs the reader to Carus' chapter in the edited volume *Toxic Terror* which contains a version of the chapter from his working paper.[73] Galamas does not cite Török, but Carus does. In this way, together, Carus and Török et al. provide much of the foundation for accounts of the outbreak post-1997. Yet, as I show below, their accounts are quite different. Certainly their accounts are transformed by others, but post-Carus (1998) the outbreak is definitely a bioterror event. Because of the vast, recent popular and scholarly literature on bioterrorism, I limit my sources to these two and a small sample of pieces which appear in national presses during the late 1990's that help show how the event is taken back into the journalistic record.

3.2.1 Török's Outbreak

Török et al.'s abstract explains that the article has two purposes. It, "highlights the challenge of investigating outbreaks caused by intentional contamination and demonstrates the vulnerability of self-service foods to intentional contamination."[74] However, a tension emerges. What the study purports to do, to provide an, "[e]pidemiologic investigation of patients," is exactly the kind of thing that the authors proved unable to do in 1984, demonstrate the presence of an intentional contamination, much less how some set of material conditions was vulnerable

[72] Judith Miller and William J. Broad, and Stephen Engelberg. *Germs: Biological Weapons and America's Secret War*. Simon & Schuster, 2012.
[73] Francisco Galamas, "Profiling bioterrorism: present and potential threats," *Comparative Strategy* 30, no. 1 (2011): 79-93.
[74] Török et al, "A Large Community Outbreak," 389.

to one. [75] Thus, the investigative challenge highlighted is in fact the epidemiologists' failure (or inability) to investigate the thing in question. Thus, through investigating a situation the article will show us how that situation's cause was never discovered. This type of ambiguity is endemic in the article and often borders on contradiction. In what follows I will show how this internal tension plays out in the article, especially as it relates to the relationship between the study's conclusion and its stated purposes. According to the abstract, the conclusion of the study will be that, "[t]his outbreak of salmonellosis was caused by intentional contamination of restaurant salad bars by members of a religious commune."[76] What warrants this claim and whose warrants are these? The short answers: not epidemiology and not epidemiologists.

Throughout each section of the article, the line is blurred between two different investigations: the initial public health investigation and the later criminal investigation. As explained earlier, these investigations were connected eventually, but each had distinct beginnings and missions. The first investigation began when officials at the Wasco-Sherman Public Health Department saw a rapid increase in reports of gastroenteritis, reports later confirmed to be linked to an outbreak of *Salmonella* Typhimurium. It became apparent to Wasco County officials that salad bars might be the common link and, thus, "the Oregon Health Division requested assistance from the Centers for Disease Control (CDC) for further evaluation and control of the outbreak."[77] Once on the scene, CDC worked with local health investigators to isolate the specific path of transmission for the bacteria (the salad bars). This, as shown above, happened quite early in the case. According to Török et al., what happened next was that:

[75] *Ibid.*
[76] *Ibid.*
[77] *Ibid.*

> Common mechanisms by which salad bars could have become contaminated were excluded. A subsequent criminal investigation found that members of a nearby religious commune had intentionally contaminated the salad bars on multiple occasions.[78]

Both of these statements are compatible with the stories told in the *Oregonian*, but the relationship implied by the statements is not. At what point were these common mechanisms excluded? As shown above, investigators claimed to have ruled out very little because each possible hypothesis encountered difficulties. Foster specifically hypothesized that food workers contaminated the salad bars and later hypothesized that food workers had been possibly contaminated a latent infection in the community.[79] These claims were at least not contradicted by Török's prior comments to the *Oregonian* in which he explained that the bacteria that caused the food poisonings was one that "we live with."[80] These hypotheses were never totally plausible because no suitable explanation was provided for how the outbreak hit so many citizens through so many different salad bars. In fact, the hypothesis most nearly ruled out by Foster was the one about foul play. From the evidence available, Foster said, that cause didn't, "seem likely."[81] Thus, if these causes were completely excluded, this was not transparent in the discourse. Instead, in ways keeping with the skeptical attitude, nothing was ruled in or ruled out. This is not to say that Foster, Török, and their colleagues did not in fact rule these causes out. Instead, the suggestion here is that the account of the investigation is very different from the one provided in 1984. Which account is more accurate is not at issue. According to the narrative told by the *Oregonian*, no possible causes were ever ruled out. Instead, investigators were portrayed as openly vacillating between a series of underdetermined hypotheses and, in the end, no definitive cause was found.

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[78] *Ibid.*
[79] "Salmonella Probe Evidence," and "Probers Still Seek," respectively.
[80] "Health Sleuths Strive."
[81] "Salmonella Probe Evidence."

In comparison to the narrative in the *Oregonian*, the order of these purported steps is inverted in the *JAMA* article. The criminal investigation began and, eventually, it was decided that the Rajneeshee engineered the outbreak. It was 'found' insofar as Rajneeshee cultists repeatedly asserted it in public then, finally, in extensive interviews with the FBI. Still, what is more significant about the statement above is that this cause was 'found' during a "subsequent investigation." Thus, the suggestion is that the conclusion to the first, epidemiological investigation is found in the second, criminal investigation. We have, in the FBI, a *deus ex machina* which provides a certain end to a scientific investigation rife with uncertainty. The scientific investigators added value because they helped narrow down the sites of contamination and, to their credit, the outbreak did come to swift end. Still, we might demand an account from Török et al. of the challenges. Why were they unable to sniff out the intentional contamination, even after *Salmonella* was found in the Rajneeshee lab? Török et al. provides only a partial account of these challenges. Almost every section of the study carries a dual character. It considers both the scientific investigation and the criminal investigation in such a way as to obscure the difference between the two. Indeed, while the article's abstract explains that the research "Design" as an "Epidemiological investigation," the summary of the case immediately includes within the 'investigation' elements that are, explicitly, not epidemiological and activities carried out by non-epidemiologists.[82] The result is a careful articulation of the relationship between science and law enforcement that obscures the separateness of the two in time and space.

After the regimented abstract, the *JAMA* paper divides itself as follows: Background, Methods, Results, and Comments. Just as the study "Design" seems to conflict with the basic

[82] Török et al, "A Large Community Outbreak," 389.

account of the case given in the article, the background, methods, and results contain the same dual character and consistently pair scientific and criminal methods. For example, the "Background" contains only two paragraphs, one which provides general population statistics for The Dalles and one which describes the rough history of the Rajneeshee settlement in Oregon.[83] The background of the case, then, includes information that was only understood as important after the public health crisis ends, information only made important by the criminal investigation. The Background carries such a dual character because, as explained already, this is not the story of one investigation but two, and the "Methods" for the study bear this out. According to the "Case Definition," the disease investigators identified symptomatic individuals, most of whom provided stool samples to confirm infection. Restaurants were divided into three grades based on the number of infections associated with them. "Laboratory studies" were carried out to isolate the infection in the stool while "Environmental studies" evaluated the restaurants and their respective food suppliers. All of these are nested under the subheading "Outbreak Investigation," an investigation which relied on "passive surveillance," of whichever cases possibly symptomatic individuals came forward.

However, the "Methods" also includes a final, short subsection titled "Criminal Investigations." Whereas the other sections are quite detailed, this section is relatively short. It seems to describe a series of events which, as with the summary above, bear resemblance to the case in the *Oregonian*, but the relationship between the events summarized is ambiguous.

> Managers of affected restaurants were interviewed about unusual incidents or disgruntled employees. Suspicious events were referred to the Oregon State Police and the Wasco County sheriff for investigation. The Federal Bureau of Investigation (FBI) reviewed local investigation efforts. Following the completion of the epidemiologic investigation and after the collapse of the Rajneeshee commune, the FBI, with technical assistance from the Oregon Public Health Laboratory, investigated clinic and laboratory facilities in

[83] *Ibid.,* 389-390.

> Rajneeshpuram. A sample of *S Typhimurium* seized from the Rajneesh Medical Center on October 2, 1985, was compared with the outbreak strain.[84]

Certainly these events seem to have occurred in the longer account provided above sourced from *The Oregonian*, but the *JAMA* narrative is much neater than the messy narrative that unfolded in 1984. Were there unusual or suspicious events? The results of this investigation are never stated in the article. When was the collapse of the commune? Does the article here refer to the accusations made by Rajneesh in September of 1985? Is the investigation mentioned here the one reported on September 28?[85] What of the samples taken then? Absent any other information about the story, the reader might be persuaded to think that these various statements are somehow related (they are not), or that the mentioned sample of *S. Typhimurium* was immediately relevant to concluding the study (it was not). Thus, a series of statements which individually comport with accounts of the case are strung together in a way that tells a wholly different, neater, coherent investigation narrative. Thus, the bioterror event which Török et al. helps to create is the product of an investigation which, in a substantial way, Török et al. creates as well.

Since the investigation is, in fact, two investigations with two methods, it must also have dual results. Like the "Methods," the "Results" is built from two parts – a longer, detailed scientific analysis (complete with analysis and visualizations of the data relevant to the outbreak). A consideration of the relationship between the customer, employee, and environmental data indicated that salad bars were the common thread. Eight (80%) of the ten restaurants with the highest case counts contained salad bars, and those represented the

[84] *Ibid.*, 390.
[85] "Lab Reportedly Used."

overwhelming majority of salad bars in The Dalles.[86] Further, of the sick individuals, no factor demonstrated a higher risk for infection than lettuce.[87] Restaurant workers (which were originally a possible cause) generally did not report illnesses before customers.[88] Some samples of salad dressing at contaminated restaurants contained bacteria, but the mix from which the dressing was made did not. Similarly, new lettuce was not contaminated. These last three statements would seem to rule out three important sources: sick workers, dry salad dressing, and lettuce.[89] However, the article does not explicitly rule these out in the "Results." In fact, no possible cause is ruled out using the data in the results section. The extensive data simply describes the case data without drawing clear conclusions. Of course, the data needs no analysis for two reasons. It was inconclusive in 1985, and the subsequent criminal investigation does all the analysis needed.

The "Criminal Investigation" section in "Results" provides another summary of events which, as before, does comport with the prior account. However, the summary implies a relationship between those events which absolutely does not. The narrative in Török et al. of the 'results' of the criminal investigation suggests the following. First, commune members testified that the outbreak was result of a deliberate contamination using cultures prepared in a secret lab. The testimony was "incomplete or insufficiently precise" to determine if the accusations were plausible.[90] A sample of S Typhimurium was located in the laboratory at the commune which was "indistinguishable from the outbreak strain."[91] Finally, two individuals were indicted, pled guilty, and were sentenced for, "conspiring to tamper with consumer products by poisoning food

[86] Török et al, "A Large Community Outbreak," 391.
[87] *Ibid.*
[88] *Ibid.*
[89] *Ibid.*, 391-393.
[90] *Ibid.*, 393.
[91] *Ibid.*

in violation of the federal antitampering act."[92] While a timeline is offered for the trial, the rest of the events are free floating in time. Recall that Rajneeshees initially accused Sheela of the crime, but were regarded with skepticism. The sample was found, but then ruled out as actually linked. Later, after Rajneeshees were indicted on other crimes (wiretapping and immigration fraud), the new testimony about the poisoning was taken. The prior events were not obviously related to the conclusion of the trial. Sheela was indicted in spite of these facts, not because of them. Thus, the entire study, the study whose conclusion is that the food poisoning was caused by "intentional contamination," is concluded in a short paragraph which uses as references the *Oregonian* and the indictment itself.[93] No account of the end of the case is given, just a statement that the case is over.

The longest single section of the article is the "Comment," a discussion section which spans two pages. Here, the authors explain at length why the source of the contaminated "initially went unrecognized."[94] Thus, the Comment offers a helpful corrective to the sections before and plainly admits to both the serious limitations on scientific investigation in general and the particular blind spots that the epidemiologists faced in this specific case. Whereas the previous sections imply a story about a coherent, single investigation into the event, the Comment tells a more complex story about the relationship between scientific and criminal investigators, about the underdetermination of evidence, and the difficulty of understanding criminal motivation. Importantly, Török et al. don't just tell the story, but they explain why they think the story needs to be told. Thus, Török et al. is willing to comment not only about the investigation but also about themselves as investigators and as skeptics.

[92] *Ibid.*
[93] *Ibid.*,395.
[94] *Ibid.*,392.

One of the biggest challenges that Török et al. faces in the Comment section is the difficulty in providing a narrative that accounts for the prior claim that all other hypotheses were ruled out as well as a good reason to ignore the circumstantial evidence that later seemed to point toward the Rajneeshee. That is, in the absence of another compelling hypothesis, why didn't the scientific investigators suspect intentional contamination? Weaver, in his speech on the House floor, excused their oversight by explaining that it was not their job to draw such inferences, but Török et al. tell a different story. They explain that, "[t]he possibility that intentional contamination caused the outbreak was specifically considered early in the investigation, but this hypothesis was initially rejected for several reasons."[95] Török et al. offer, in total, nine reasons to explain their rejection of the intentional contamination hypothesis. In general, the nine reasons boil down to the scientific investigators not being able to imagine a scenario in which humans would have purposefully caused an infection in the manner observed. That is, while many of their reasons relate to material conditions of the outbreak, the objection at every turn is that the material conditions understood to be present are not consistent with human behavior. This is clearest when comparing the first and ninth reasons: "(1) No motive was apparent…(9) Finally, even in thoroughly investigated outbreaks, the source sometimes remains occult."[96] Thus, the suggestion is that the scientific investigators find it more reasonable to claim that an unknown, accidental/natural cause exists than to claim an unknown human cause exists. The default position, then, is to assume a non-intentional cause until some evidence arises to suggest a human cause. The default position with respect to human causes is to take a skeptical attitude. This seems like a perfectly reasonable way to start an investigation, especially when, as the article explains, they, "were aware of only 2 reports of foodborne illness caused by intentional

[95] *Ibid.*,394.
[96] *Ibid.*

contamination with biologic agents."[97] Yet, this reasoning tends to obscure the fact that the reasoning amounts to a claim with the following structure: '*In a case like this*, certain causes are more likely than others.' However, *the type of case* at hand is exactly what is in question. Indeed, the thrust of the article explicitly affirms this – this kind of case is hard to see. Further, as I show in Chapter 4, once you apply a particular name ("bioterrorism") a momentum seems to build such that the story wants to keep its first name. This was true with the outbreak. Once it was 'food poisoning' it stubbornly remained 'food poisoning' even after 'germ labs' and 'terrorists' emerged into the case.

The other seven reasons restate the problem of motive in different terms, and each provides an interesting puzzle. Reason three states that investigations into "questionable activity" yielded no "recognizable pattern of unusual behavior."[98] Similarly, reason five explains that the fact that the exposures seemed to have happened weeks apart, but that "a saboteur would have acted on 1 occasion, rather than risk repeated attacks and exposure."[99] Should we expect that unusual behavior fits into a recognizable pattern? What is the burden for such a pattern? Should we think that a saboteur is so careful and calculating? Must we not make huge assumptions about a saboteur's plan in order to calculate risk on his or her behalf? In short, we must already have some kind of attitude in place that outstrips the matters of fact that we can use to interpret the case. This same tension will be present in the case pursued in Chapter 4, the case of Bruce Ivins. There, however, investigators drew quite different conclusions about the nature of the patterns of action carried out by irrational actors. Assuming that the testimony secured during the criminal investigation is trustworthy, it turns out that the saboteurs were, in

[97] *Ibid.*
[98] *Ibid.*
[99] *Ibid.*

their own way, careful and calculating. As the witnesses tell it, the outbreaks were a series of proof-of-concept experiments, and this possibility simply didn't occur to the scientific investigators even though, on the face of it, running a proof-of-concept experiment prior to a major attack is not only rational but nearly scientific.[100] None of this is to say that the disease investigators were incompetent. Almost no one but Weaver publically claimed that a madman was on the loose, and his version of events was almost entirely ignored or lampooned until long after the fact. What is of interest here is the expectation of a kind of action on the part of the poisoner bounded entirely by the imagination and attitude of the person doing the expecting. As the scientists imagine it, the prediction of a motive is an identificatory act. The scientists imagine that the poisoner would think like the scientists do and consider the risks of such attacks.

In writing their piece for *JAMA*, Török et al. explicitly hope to change the definition of the case and demonstrate to other epidemiologists how a good hypothesis (an occult cause) can be not only wrong, but apparently convincing in the face of evidence to the contrary (the bacteria found on the commune and the first wave of accusations against Sheela). As Török et al. put it:

> It is hoped that wider dissemination today of the epidemiologic findings from The Dalles outbreak will lead to greater awareness of the possibility of other incidents and earlier recognition, when or if a similar incident occurs.[101]

Again, the distinction between the findings and the conclusion are blurred. It is not the epidemiologic findings that will lead to a greater awareness of similar incidents because it was exactly the epidemiologic findings that proved insufficient to demonstrate the existence of the "incident." The limiting factor was not the findings but the imagination of the investigators. As the authors put it, "the epidemiologic method is inherently limited; it determines risk and association and can indicate how contamination probably occurred. It cannot establish

[100] Callister and Zaitz, "Sheela, once a roaring;" Török et al, "A Large Community Outbreak," 394.
[101] *Ibid.*

motive."[102] Yet this is not the account Török et al. has just provided. The scientific investigators hypothesized probable causes while explicitly considering possible motives: political action, extortion, disgruntled employees, etc. If the method cannot do these things then what was it that the epidemiologists were doing when they drew up objections one through nine?

Because of the challenges in the case, the authors make several suggestions for how to go forward. Definitions and names, after all, suggest responses. As the authors put it, prevention is not a reasonable solution.[103] First, since *Salmonella* is so widespread, one need not buy it. Second, the salad bars could not have been maintained in a way that would have prevented a contamination. Their suggestion is that health professionals alert public health officials, and, when the public health officials find an unexplainable pattern, they should request the assistance of law enforcement. Even as the authors willingly admit that they were unable to bring this particular case to a close, they still understand their method of investigation as an important part of the process for either uncovering such cases or actually solving them, once epidemiologists more appropriately understand what it looks like when a human-caused outbreak masquerades as a natural, occult caused outbreak.

Speaking to Lawrence Altman, M.D. and columnist for the *New York Times*, Török confirmed this motivation to change the way that epidemiologists understand unexplainable cases. He explained that, "[t]he possibility of deliberate contamination has been on every investigator's list since the Rajneesh incidence and it has greatly influenced how we approach

[102] *Ibid.*

[103] As noted in 2.5, this attitude against the general plausibility of prevention fits with Lakoff's claims about the general implausibility of prevention within the late 20th century Public Health model. Predictably, Török et al. suggest a combination of surveillance and preparation.

outbreaks of illness."[104] The 'we' here refers to epidemiologists who, Török explained, have since 1984 had a real understanding of how dangerous and possible intentionally caused out breaks are. However, just as the information was crucial for scientists it is dangerous in public. Török explained that the paper published in 1997 (Török et al.) was in fact written in 1987, but it "sat in a box for a decade."[105] He held back publication of it for two reasons: the risks of encouraging copycats and media sensationalization. Even as these motives seem noble enough, one wonders how the journal article might encourage copycats if the local and national news coverage had not. Recall that several journalists described the essential plan carried out by the poisoners (lab grown salmonella was squirted into salad bar food). Further, one might argue that the story had been sensationalized already, though the sensational elements had more to do with Rajneesh than Sheela's poisoning. In either case, Török's comments seem to suggest that what really matters about the event is its impact on the behavior of health care professionals. They are, after all, the ones who need to know when to call in the CDC and, afterward, law enforcement.

The public, it seems, either do not need to know or cannot be trusted to know. Thus, something of a paradox emerges, a paradox more thoroughly elaborated in Carus' description of bioterrorism (below) and the anthrax mailing case in Chapter 4. While scientific investigators are the ones capable of investigating the outbreak, their abilities run up against the wall of human motive. Can they comprehend the strange and unusual motives of an individual seeking to cause an outbreak? While citizens were the ones capable of intentionally contaminating the salad bars, it was only possible through a combination of scientific expertise and scientific materials.

[104] Lawrence Altman, "Some Medical Puzzles Lead to Dark, and Criminal, Minds," *New York Times*, August 12, 1997, C3.
[105] *Ibid.*

Further, some element of the relevant scientific expertise is so dangerous and communicable that Török and his colleagues thought it best not to speak of it. But what of the scientists? Should we think ourselves safe from them? If we are safe from them, it must be because they are not the kinds of people who carry out such activities. They are not terrorists. This, of course, merely relocates our anxiety. In a world of risk, we cannot hope to be safe. We can hope, at best, to be saf*er*.

Importantly, neither Török, in his interview with Altman, nor Török et al. in *JAMA* called the 1984 salmonella outbreak a bioterror event. Instead, both sources link the food poisoning outbreak with bioterrorism through association with the (then recently) infamous Japanese cult known as Aum Shinrikyo. In the interview with Altman, Török described Aum Shinrikyo as the reason why *JAMA* requested that he submit his article. In the *JAMA* article itself, the event is brought into comparison with the salmonella outbreak.

> The recent discovery of the stockpiling and use of biological agents by the Japanese cult Aum Shinrikyo serves to remind us of a continuing threat that biological weapons might be used by other terrorist groups in the future. It is hoped that wider dissemination today of the epidemiologic findings from The Dalles outbreak will lead to greater awareness of the possibility of other incidents and earlier recognition, when or if a similar incident occurs.[106]

By Török's et al.'s earlier logic, it seems as if we should think that Aum Shinrikyo and the food poisoning outbreak are events of the same kind. In 1995 the cult used sarin gas in the Tokyo subway system, killing thirteen and injuring many more.[107] After the attack, investigators discovered that the group had already secured, cultured, and even attempted to use a variety of other bacteriological and toxin agents, including botulinum toxin and anthrax. There is some speculation that the group had even secured a sample of Ebola, but was never able to use it. It

[106] Török et al, "A Large Community Outbreak," 394.

[107] For a thorough account of Aum Shinrikyo and their various chemical and biological attacks see, David E. Kaplan and Andrew Marshall, *Cult at the End of the World* (New York: Crown, 1996).

was only through a series of scientific mistakes that the botulinum and anthrax attacks failed. When Török et al. mentions "other terrorist groups," do they mean to imply that the Rajneeshees were a terrorist group or is the suggestion that they merely participate in activities that are like those of a terrorist group? Is that a distinction with a difference? Is it possible for a non-terrorist to commit a terrorist act? If such a distinction exists, it is unlikely to be found in an argument made by Török. The epidemiological method cannot establish motive.

In this section, I demonstrated how the epidemiologists who investigated the food poisoning outbreak play an important role in transforming the case from "intentional contamination" into a terrorist event. This transformation requires both a description of their original skeptical attitude and its subsequent de-valuing. The epidemiologists repeated insistence that there was no proof of a human cause was sanitized from the bulk of the *JAMA* article and mentioned only in the Comment section as a kind of liability to their method which, Török et al. claim, already included considerations of human causes. While the cause of the outbreak is up in the air, paranoia and skepticism are center stage, but after the case is settled neither attitude is necessary. With hindsight, the skeptics seem to regret their skepticism or at least chalk it up to a series of bad assumptions and failures of imagination. The authors do not seem to be advocating that their colleagues make huge inferential leaps, but it is easy to see how increasing "awareness of the possibility" is one of the steps toward paranoia. The goal here is to imagine more possibilities. Understood as simply imagining more rational human causes (like a proof-of-concept), this is not a massive expansion of hypothesis consideration. However, as shown in Chapter 4, when this expanded world of possibility includes the consideration of *irrational* human causes, hypotheses become far more fraught. In sum, the *JAMA* article both shows how attitudes are de-emphasized when stories are retold and how Török et al. re-described their

skeptical attitude as a professional failure even though it was not understood to be such by the chief paranoid of the episode, James Weaver. By making themselves out to be inadequate criminal investigators, Török et al. both ally themselves with a powerful institution (the Justice Department) while simultaneously chipping away at their own disciplinary values and standards of evidence. This alliance has, as I hope to show, dramatic consequences.

What still remains with the Rajneeshee case is to show how it finally became not just 'like' bioterrorism but an exemplary case of bioterrorism. In both the *JAMA* article and accounts in the *Oregonian*, the label of terrorism sits at arm's length from the Rajneeshee and the outbreak. Whereas the 'terror' labels in the *Oregonian* came from other Rajneeshee, the label here is applied by epidemiologists who, as they tell it, know how cases are defined. In the *Oregonian*, the event seemed to be part of two different, possible patterns. First, the event was an example of a new age cult gone dangerous. Second, the event was an example of negligent food handlers and salad bars. Both patterns were sensational enough to capture journalistic attention, but both faded away. Török et al.'s comparison is different. The suggestion made by Török is that a terrorist attacks like the one which just happened (Aum Shinrikyo) have not only already happened in the past, but could happen again. Terrorist attacks do not just happen in 'over there' places like Japan, but in 'over here' places like The Dalles. The food poisoning outbreak is a, "valuable reminder that not only a bizarre cult in Japan did terrible things."[108]

In what follows, I briefly show how the event is currently understood or, at least, how the now definitive account of the event looks and is justified as a bioterror attack by Carus. Like Nixon, Carus is involved in a specific and explicit act of definition. As I will show, he understands his work as the creation and filling of categories. Thus, when he makes the claim

[108] Török quoted in Altman "Some Medical Puzzles"

that the outbreak is, "the only bioterrorism incident in which human illness has been verified," he at least attempts to make visible his warrants for applying the label. As a historian, however, Carus attitudinal position is quite complex. He is, on the one hand, an extreme skeptic – since he hopes to generate a valid case definition he must rule out of his investigation any incident in which there is insufficient evidence to 'verify' bioterror. On the other hand he is invested in enlarging our view of conceivable motives to include the irrational and apocalyptic. As such, he is an ally to the paranoid insofar as he helps make it possible to use the Rajneeshee poisoning as a warrant for our paranoia in the same way that the dead sheep of Dugway acted as a warrant for the paranoia about the dead cows of Detrick.

3.2.2 America's First Bioterror Event

While Carus admits that there, "is no commonly accepted definition of bioterrorism," his survey requires a definition.[109] Thus, for the purposes of his study, he stipulates that bioterrorism is, "assumed to involve the threat or use of biological agents by individuals or groups motivated by political, religious, ecological, or other ideological objectives."[110] Carus explains that many official definitions of terrorism tend to focus entirely on a particular set of motives – the intimidation of governments or societies. However, this focus ignores the possibility that, for some terrorists, the goal of mass casualty may be an end in itself. Here, Carus has in mind groups with what he calls "apocalyptic visions."[111] Such groups use violence

[109] W. Seth Carus, "Bioterrorism and Biocrimes: the Illicit Use of Biological Agents Since 1900," (Working paper, National Defense University, Washington DC, 2001), 3, http://www.dtic.mil/dtic/tr/fulltext/u2/a402108.pdf.
[110] Carus, "Bioterrorism and biocrimes," 3.
[111] *Ibid*.

in order to further, "millenarian visions of creating a better society."[112] He cites as an example a pair of teenagers from Chicago who, in 1972, formed a group called R.I.S.E. and planned to contaminate the water supply with *Salmonella typhi* as part of a racist plot to kill large numbers of Chicagoans and repopulate the city with whites.[113] Additionally, Carus suggests that some terrorist have objectives that are not coercive but manipulative. That is, some terrorist attacks may be designed not to look like terrorist attacks. He specifically explains that, "in many instances success depended on the lack of appreciation that a disease outbreak was intentional."[114] This exception clearly fits the case of the Rajneeshee food poisoning. Thus:

> A bioterrorist can include any non-state actor who uses or threatens to use biological agents on behalf of a political, religious, ecological, or other ideological cause without reference to its moral or political justice.[115]

That is, the root of bioterrorism is terrorists and the root of terrorism is ideology. What matters is motives. Carus intends to maintain the traditional motivations ascribed to terrorists themselves, but enlarge the set of possible activities that a terrorist might want to engage in. In this framework, a bioterrorist attack is nothing other than a biological attack perpetrated by a terrorist.

Any non-state actor with a motive beyond the crime itself qualifies as a terrorist, save when the 'crime' is nothing other than terrorizing. Carus extends his consideration of bioterrorists to include also biocriminals, both because he wishes to make a meaningful distinction between the two and also because both face similar obstacles in acquiring and using biological weapons.[116] This second category, the biocriminal, is synonymous with "traditional

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[112] *Ibid*., 9.
[113] *Ibid*., 102-103.
[114] *Ibid*., 3.
[115] *Ibid*.
[116] *Ibid*., 7.

criminal motives."[117] Such motives include murder, extortion, damage of crops, revenge, and the disruption of some activity or institution.[118] Carus explains that even some criminals intend to terrorize their victims, but the terrorism is limited to the victim and therefore fails to qualify as proper terrorism. Interestingly, it is probably the case that Bruce Ivins, the case of interest in Chapter 4, would not count as a bioterrorist in Carus' view as Ivins had no clearly demonstrated ideological motive.[119] This represents a disconnect between Carus' definition and the post-9/11 legal definition of terrorism in which use of any weapon of mass destruction, regardless of motive, qualifies as terrorism.[120] Importantly, Carus' report predates 9/11 as well as the Amerithrax investigation.

Carus' report quite extensively lays out every potential case that might fit as a bioterror event. His report contains research on 270 alleged cases of bioterrorism (planned or carried out). Ninety of these are not confirmable and ruled out as conjecture (the aforementioned skeptical move). Ninety-seven of the confirmable cases are not clearly "criminal" or "terrorist," and thus ruled out because the relevant motives are undeterminable. Twenty-seven of the cases include motives which Carus deems correctly understood as "terrorist". In eight cases a biological agent was acquired, but in only five cases the agent was used. Two of the confirmed agent acquisitions happened after World War II.[121] One of these was the various failed biological attacks carried out by Aum Shinrikyo; the other is the 1984 Rajneeshee food poisoning.[122]

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[117] *Ibid*.

[118] *Ibid*., 9, Table 2.

[119] "Most of the motivations mentioned would lead to his characterization as a biocriminal." Seth Carus, e-mail message to author, February 23, 2012.

[120] Title VIII of the USA PATRIOT Act changed several aspects of the US Code of Justice relating to terrorism. One alteration was the inclusion of biological weapons as a weapon of mass destruction. Use of such a weapon is sufficient for prosecution under the terrorism statute. See U.S. Code 18 (2002), § 175.

[121] Carus includes three events concurrent with or prior to WWII as bioterrorist activities: the use of anthrax-contaminated soil by a British protest group (they used the soil ironically, as a protest of a British anthrax bomb), the

Why the Rajneeshee and their outbreak are included in the category of bioterrorism as opposed to biocrime is not completely clear, but Carus' description of the event and the group offers some clues. As he sees the group, the Rajneeshees, like the Aum Shinrikyo, are "religious cults with political agendas."[123] Thus, the Rajneeshees may qualify as a terrorist group since they have, in general, the kinds of motives which fit Carus' framework. In this view, the food poisoning is a bioterror attack because it is a biological attack made by terrorists. Additionally, since the food poisoning was, in and of itself, designed as part of a larger plot to disrupt an election, the attack has an agenda beyond the attack.[124] While Sheela may have enjoyed terrorizing the citizens, she was not targeting them specifically for revenge or extortion. Thus, the food poisoning was a bioterror attack because it was a biological attack made with terroristic motives. Perhaps the claims by the Rajneeshee that Sheela was engaged in both 'medical' and 'political' terrorism serve as support for the claim that the Rajneeshee under Sheela's leadership are terrorists, but there is a circularity to Carus' twin reasons. We're willing to say that the Rajneeshees are terrorists because of their motives, but what warrants us in ascribing those motives to them other than the attack is not as well spelled out. That is, seeing the attack as terrorism would seem to act as evidence for the Rajneeshee being terrorists even as their status as terrorists helps us describe the attack as terrorism. Ultimately, the account of the event provided to federal investigators by Krishna Deva – the account in which he explains Sheela's plans to rig the election – functions as the foundation for terrorist label. There was a political struggle going

use of a plant toxin by the Mau Mau African Independence movement in 1952, and a possible attack on German forces by the Polish resistance during WWII.

[122] Carus, "Bioterrorism and Biocrimes," 8.

[123] *Ibid*., 28.

[124] *Ibid*., 9.

on between Wasco County and the Rajneesh and the outbreak was one of many events within that context.

Generally, there seems to be a presumption that we already know that the Rajneeshees should be included in the category. Carus explains in his introduction that, "[a]ccording to the FBI, there is only one instance in which a terrorist group operating in the United States actually employed a chemical or biological agent."[125] This instance is, of course, the 1984 food poisoning in the Dalles. Perhaps, then, Carus includes the Rajneeshee in bioterror category because it is already standard practice to do so, but the narratives from the 1980's shown above cast some doubt on this position from a public point of view. Certainly we can imagine that the FBI had called it terrorism all along behind closed doors, but it is not at all clear that this was the case. Further, Carus' citation for the FBI's classification of the event as such is highly ambiguous. John P. O'Neill, former Chief of the Counterterrorism section of the FBI, testifying in 1995 before the Senate Committee on Governmental affairs on Weapons of Mass Destruction notes that even as the potential consequences of a catastrophic attack by a biological weapon are quite high:

> …the only documented actual chemical-biological attack in the United States involved the use of a biological agent which occurred in Oregon in 1984, when two members of a sect produced and disbursed salmonella bacteria in restaurants in order to affect the outcome of a local election.[126]

Even as the attack is embedded amidst descriptions of terror attacks and terrorists, the Rajneeshees are never named, much less called terrorists. The materials for the attack are relevant, but are the attackers and their motives of like kind? Are they automatically terrorists

[125] *Ibid*.

[126] Testimony of John P. O'Neill, Supervisory Special Agent, Chief, Counterterrorism Section, Federal Bureau of Investigation, U.S. Senate, Committee on Governmental Affairs, *Global Proliferation of Weapons of Mass Destruction, Part I*, 104th Congress, 1st session, October 31 and November 1, 1995, 238.

for using biological weapons? Are they similar enough to Aum Shinrikyo in their agenda to be called terrorists? This is even more unclear in O'Neill's testimony than it is in Carus' explanations. As with the *JAMA* article, Carus' report tends to obscure the inferential gaps through a combination of rigorous methodology, a cleaning up of messy narratives, and an appeal to external narratives (criminal investigators in the former case, O'Neill in this latter case).

What remains relevant for both O'Neill and Carus is that the Rajneeshees were able to do what the terrorist would need to do – acquire a disease agent, make enough of it to build a weapon, and use the weapon. Thus, the case is relevant to law enforcement even if it is not terrorism. Like Török's move to associate the Rajneeshee with terrorism, Carus' categorization of the event as a terrorist attack is meant to educate law enforcement on what is possible and, therefore, what they should be on the lookout for. With so few events in the category, there is no common type when it comes to motivation and action. While each group and their respective attacks/attempts face similar material obstacles, few are very similar in kind. Work must be done to bring them together, and Carus does that work by enlarging the motivational categories ascribed to terrorists. In once again shining the light on motivation, Carus continues the pattern that Török et al. participated in and Nixon started – what we need to worry about are particular kinds of people who are likely to be engaged in these particular kinds of activities. Nixon in gesturing toward the enemy, pointed outward, away from the United States. In the age of terror, however, the enemy is all around us. Yet, in Carus' report, the rhetoric of defense becomes even more profound. By setting the Rajneesh alongside groups like the anti-Communist Minutemen and the Weather Underground (both of whom operated in the 1960's and 1970's), Carus shows

that it has always been the case that we have been surrounded by terrorists.[127] Understood this way, Nixon's shift in policy to denounce biological weapons was not only a renunciation of the irrational motives of nations like the Soviet Union, but militants within the Homeland who have been with us all along. Carus and Török et al. work together to bring Nixon's biothreat back to the homeland, and, by Carus' account, by 1998 we already knew that this return had occurred.

3.3 CONCLUSION: BRIDGING THE EVIDENTIARY GAP

On May 11, 2004 Hope Kurtz, one of the founding members of the Critical Art Ensemble (CAE), stopped breathing.[128] Her husband Steve, Professor of Visual Studies at SUNY Buffalo, called 911. Paramedics were neither able to resuscitate Hope nor determine why she stopped breathing. However, while in the Kurtz residence emergency personnel saw a variety of troubling materials, scientific materials to be more precise. The Kurtz home contained a host of scientific equipment that would be quite ordinary in a molecular biology lab (dishes, reagents, materials for culturing bacteria, etc.) but would seem out of place in someone's living room. The next day, as Kurtz planned his wife's funeral, he was visited by the FBI. Kurtz explained to FBI agents and local detectives that the strange equipment was actually a part of an art installation in-progress (one detective remembers Kurtz even inviting him to the show).[129] In the weeks that followed, the FBI raided Kurtz's house, confiscating much of the installation, and labelled the

[127] Carus, "Bioterrorism and Biocrimes," 28.

[128] An account of Steve Kurtz story after the death of his wife is detailed at the archive of a website set up for his legal defense ("CAE Defense Fund," last modified September 17, 2009, accessed November 30, 2014, http://www.caedefensefund.org/.) as well as in a book written in the wake of his legal troubles: Critical Art Ensemble, *Marching Plague* (New York: Autonomedia, 2006).

[129] Robert Hirsch, "The Strange Case of Steve Kurtz," *Afterimage*, May/June (2005): 23-32.

entire structure a biohazard while it was checked for contamination. The house was soon cleared (Kurtz had cultured only harmless bacteria), though he and other CAE members were soon subpoenaed to appear before a grand jury. Most refused to testify. The government attempted to have Kurtz indicted under the expanded portion of the anti-terrorism statute that linked biological weapons to terrorism.

The Department of Justice (DoJ) accused Kurtz of possessing a biological agent for a reason other than defense or education, even as their own forensic team had shown that the biological agent was not capable of being made into a weapon. Certainly, what the FBI encountered in Kurtz's home was quite strange and we might forgive them for their reaction. As I will show in Chapter 4 the DoJ was amidst the decade-long Amerithrax investigation and knew too well the possibility that American citizens might be making biological weapons. Still, history cuts both ways. Kurtz and the CAE had been engaged with science-related installation art since 1987. In 1997 the performed an installation piece ("The Flesh Machine") that involved the genetic testing of participants to show how fertility programs might dangerously re-articulate eugenics. This elaborate performance was carried out in five countries before being converted into a smaller installation ("The Society for Reproductive Anachronisms") that was performed in 1999 and 2000 in London and at Rutgers University. This installation is just one example of how the CAE used scientific technology to highlight cultural, political, and philosophical problems through installation and performance art in a highly public and non-dangerous way. Their installations, in fact, generally mean to raise awareness about techno-scientific problems. By 2004, they had performed several other major installations in both the United States and Europe and published several books. For his own part, Kurtz had already been a Professor of Art at Carnegie Mellon University and SUNY-Buffalo. In short, it is not difficult to demonstrate

how 'normal' this seemingly strange (and biologically harmless) evidence was within the context of Kurtz's internationally known work. The foundation for a skeptical view of Kurtz's possessions is strong, but the DoJ marched on. There was not, nor could there be, definitive proof that Kurtz was not a dangerous man.

Repeatedly, the grand jury refused to indict Kurtz on terrorism-related charges. The DoJ forged ahead, settling finally on charges of mail fraud for both Kurtz and his collaborator, University of Pittsburgh Genetics Professor Bob Ferrell. Legal fees mounted, so a defense fund was set up to help Kurtz win his case. In the face of both time and physical difficulties (in the form of a series of strokes, Ferrell is a lymphoma survivor), Ferrell plead guilty to misdemeanor fraud. In April of 2008, a federal judge threw out the remaining case against Kurtz and ruled that even if Kurtz was guilty of the actions laid ascribed to him, those actions did not qualify as a crime.[130] After four years in court, an art professor was able to get the federal government to admit that the material he possessed in his home was indeed part of a benign (though culturally subversive) art project of a kind that his art collective had been well known for creating for 20 years. The coroner had long since ruled Hope's death from natural causes, but the possession of biological material remained 'unexplainable.' Why did Kurtz have these things? His previous history as an artist, his various awards, his professional appointment, and his own explanations were insufficient to convince federal investigators just as the presence of a germ lab at Rajneeshpuram was insufficient to convince disease investigators in that case. Kurtz was unable to account for himself and his possession of biological materials in the face of the paranoid attitude. Kurtz – nor his network of fellow artists – were properly qualified to explain that he was not a bioterrorist. As Nixon explained, as the Biological Weapons Convention clearly

[130]An archived copy of the judge's statement can be found at the Critical Art Ensemble's defense fund website: http://www.caedefensefund.org/releases/Order_042108.pdf.

states, as the PATRIOT Act makes apparent, only the irrational actor, the terrorist would seek to possess such *things*. The power to ascribe motive, especially irrational motives, is given up to law enforcement and that power becomes sufficient to turn a set of material conditions, even one in which there is no attack and no terrorist, into a bioterror event. While the material masquerades as the sufficient cause for the case, it is the absence of an acceptable motive that provides the real foundation. Further, it is the absence of evidence which always acts as a foundation for the paranoid attitude and in cases where the skeptical attitude is de-valued there is no narrative corrective possible to balance the story out. Whatever the role of the forensic scientists and biohazard technicians who cleared Kurtz's home, they were not understood as being properly capable of providing a good reason to think that Kurtz was not dangerous.

In order to transform the food poisoning outbreak into an act of bioterror, two different kinds of work had to be done to the case. Either the Rajneeshees need to be shown to be the kind of people who are terrorists or the food poisoning needs to be shown to be the kind of action which counts as terrorism. However, treating these as actually different ways of transforming the case obscures the way in which the latter may be necessary for the former. Both modes of transformation can happen simultaneously and reinforce one another as bridges over the evidentiary gap that was formerly sustained by skepticism. After that gap is bridged and made reasonable stories about the Rajneeshee as terrorists do not seem paranoid. Unlike Weaver's story, such narratives are not founded on an absence of evidence or an ambiguity. Instead, the Rajneeshee are self-evidently terrorists in the same way that the outbreak was originally self-evidently food poisoning. Within the context of the narratives, these labels are presented as obviously accurate and require no explanation or justification for their application. It may be right to think that the Rajneeshee were terrorists all along, but the narrative of their terrorism,

like their salmonella outbreak, was obscured from investigators and the public view. They seemed to be more appropriately understood as something else – a new age cult, a difficult local political struggle, etc. The outbreak surely seemed more appropriately understood as something else – an outbreak caused by some natural, occult source or the negligence of food workers. The outbreak seemed this way until it did not – until it seemed more like the sarin gas attacks by Aum Shinrikyo or the various poisoning plots thought up by R.I.S.E., the Minutemen, and the Weather Underground. By bringing all of these events into focus as a single phenomenon, epidemiologists and law enforcement are able to imagine the kinds of things that Török and Foster could not. They can see through an unexplainable case toward its occult, human cause.

However, what will warrant transforming suspicion of a human cause to certainty about it? Once Török et al. and Carus succeed in convincing us that a wide array of complex and often irrational human motives are possible, what will function as evidence that we are dealing with such a case? In the case of the Rajneeshees, the suspicion was forced onto investigators by commune members who were all too eager to both accuse Sheela of her crimes and later testify against her to reduce their own sentences. The physical evidence, insofar as there was any, linking her to the food poisonings did not change; no smoking petri dish was found. Instead, Sheela simply pled guilty without giving testimony about what she actually did. The certainty of her guilt rests on the certainty that the system seems to have worked. An interesting consequence of the transformation of the food poisoning into a bioterror attack is that the only successful and then successfully convicted bioterrorist in America served less than three years in prison. The trial was before 9/11 and the adjustment of the US Code of Justice by the PATRIOT Act which now might classify what Sheela did as the use of a weapon of mass destruction. How

would that trial have played out? How would the case have been 'sensationalized' if it would have happened in the twenty-first century?

Definitions have consequences; this is the whole point of definitions. Distinctions without differences are parasitic and unhelpful. Thus, there are consequences when definitions shift. In the case of bioterrorism, the possible consequences do not hinge on the material conditions for the crime. Those proved to be totally inadequate for investigators to even see the event in 1984. Instead, they hinge on the ascription of motive to the suspected attacker. If the attacker is already a terrorist, then the motive of terrorism is clear. But how should we classify a person as a terrorist in the first place, prior to the act? As shown above, such a division can be synergistic as both the ascription of terrorist motives and the description of a terrorist act can work hand in hand. Thus, Carus' reliance on motives and the US Code of Justice's reliance on the materials of a weapon work together to create an ambiguous definition of terrorism which has few clear limits and thus allows for a wide range of interpretations. Carus says that official and legal definitions of terror assume that, "the core of terrorism is the ability to terrorize," but who will determine who has been terrorized and who can terrorize?[131] Carus goes on to explain that the inadequacy of this definition is exactly why we must look beyond terrorizing and consider any and all 'ideological' objectives. This does nothing to resolve the puzzle. Instead it moves the debate to another question: who will be capable of locating the ideologue and who will be able to resist being accused of such a thing? None of this is self-evidently problematic so long as there exist a variety of investigators with a wide range of motives who can create through productive tension what Török et al. essentially had in mind – a consideration of all possible hypotheses. Their ultimate goal is certainly a good one. Investigators should not too quickly

[131] Carus, "Bioterrorism and Biocrimes," 3.

rule out hypotheses that rely on their ability to imagine. Enacting this goal is difficult because it is hard to know when your imagination is failing. This problem does not necessitate paranoia, but it can enable paranoia in certain circumstances. This is my most substantial concern. When skepticism is seen as an atavism to a time before our imaginations had developed properly, the paranoid attitude can take us too far.

Sheela did not even attempt to account for her association with her germ lab. Ferrell, preferring to avoid the continued difficulty of being under Federal Prosecution, took the government's description of what he did. Ferrell was no terrorist, but he was a criminal. Kurtz, however, refused to accept the government's account. Thankfully, part of the justice system finally recognized the incoherence of the trial against Kurtz and validated Kurtz' own account of himself. Unfortunately, it required four years, hundreds of thousands of dollars, and profound suffering for Kurtz (who, recall, became a suspect on the same day on which he became a widower). In the next chapter I pursue at length a case against a man who was unable to live long enough to be given space to account for himself in public, much less be validated. In Chapter 4 I show how a case against a bioterrorist can be built solely on motive and how such a case relies on an imbalance between skepticism and paranoia that is dissolved after the fact. In this final case, a new difficulty arises as well because skeptics find themselves dangerously close to the suspect. When scientists are suspects, skepticism becomes not only de-valued but evidence of possible guilt.

4.0 ACCOUNTING FOR THE UNACCOUNTABLE

> …the limiting of our programs to research [will not] leave us vulnerable to surprise by an enemy who does not observe these rational restraints.
>
> -President Richard Nixon 1969[1]

> This is the warfare practiced upon us by nature, the unremitting barrage of infection by old and by new agents…
>
> -Dr, Josh Lederberg 1970[2]

> Dr. Ivins failed, at nearly every turn, to provide reasonable or consistent explanations for his suspicious behavior.
>
> -*Amerithrax Investigative Summary*[3]

As demonstrated in Chapter 2, the objects of suspicion for the paranoid attitude toward biological weapons in the 1970's and 1980's flowed from two points of origin: the unrestrained nation (i.e. the Soviet Union) and Mother Nature. However, starting in the 1990's, a new kind of enemy emerged that would come to take on properties of both. This new enemy, the bioterrorist, is unrestrained by not only the material restrictions placed on warfare by international law but also by the reasons that motivate those restrictions. Over time, however, the distance between these two kinds of unrestraint closed within paranoid narratives and the former comes to be a sufficient warrant for assuming the latter. As a result, it becomes difficult or at least rare to find

[1] Richard Nixon, "Statement on Chemical and Biological Defense Policies and Programs" (speech, Fort Detrick, MD, November 25, 1969), http://www.presidency.ucsb.edu/ws/?pid=2343.

[2] Joshua Lederberg, "Engineering Viruses for Health or Warfare :Threat to Crops," *Washington Post-Times Herald*, August 16, 1970, B2.

[3] Department of Justice, *Amerithrax Investigative Summary*, 86, accessed November 20, 2014 http://www.justice.gov/archive/amerithrax/docs/amx-investigative-summary.pdf.

an account of any use of biological weapons that does not contain within it the germ of irrationality. Within the context of Nixon's rhetoric, for instance, the rational restraint against biological weapons implies that those who ignore the restraints are, in some way, irrational. Török et al.'s explanation of how their own imaginations failed to account for the possibility of the Rajneeshee attack opens up a space for these partially/wholly irrational actors. The existence of apocalyptic cults and other groups who either have irrational motives or act in ways that don't seem rationally instrumental to their goals fills that space in Carus' working paper. In each case, the paranoid attitude manifests in slightly different ways as the background assumptions of each moment in history shift. Nixon, Török et al., and Carus each help shape the possibilities for biothreat narratives and the ground from which the paranoid and skeptical attitudes will depart.

Together, the cases of the outbreak and Steve Kurtz show how labels to events seem to 'stick,' regardless of which attitude generated those labels. Materials and material conditions in both cases are used as the ground for inferences about the nature of those events. Epidemiologists saw the Rajneeshee germ lab and hypothesized a harmless clinic. Federal Investigators saw Kurtz's harmless artwork and hypothesized a germ lab. That investigators demanded an explanation from Kurtz but not from the Rajneeshees is contingent almost entirely on how the event unfolded and how the event was already described. A suspected bioterrorist is presented with an impossible question: can you account for your relationship with these technologies which are properly understood as weapons? In the case of Ma Anand Sheela and Ma Anand Puja, no such account was required for two reasons: first, forensic scientists claimed the proper understanding of the materials were clinical in nature and, second, both women later entered Alford pleas and were convicted on several charges of conspiracy and assault for their actions. Their materials were seized and their motives were explained by someone else, Krisnha

Deva (aka David Berry Knapp). The account by Knapp has largely become the account of record, shored up by defense researchers like Seth Carus, Jonathan Tucker, Judith Miller, and others who use the event in The Dalles as a case-study in bioterror. In the case of Steve Kurtz, the account was simply not accepted by the authorities who demanded the explanation after Kurtz was already an object of suspicion. Kurtz had not carried out an 'attack,' but his possession and handling of certain materials seemed to make him guilty of something in the eyes of the Department of Justice (DoJ). His reasons for possessing and handling the materials, as part of his work with the Critical Art Ensemble, were not sufficient, not believable, or not properly carried out. After three years under suspicion, his co-defendant Robert Ferrell gave up and made a plea deal. Ferrell admitted, under the duress of his failing health, that he could not suitably account for what he had done. Steve Kurtz continued to insist that he could and, perhaps only due to his stamina, he was able to maintain his innocence. Thanks to one federal judge and a great exertion of time and energy by Steve Kurtz and his defense fund history seems to judge Kurtz to have been unequivocally in the right *all along*. Just as the skeptical attitude is converted into professional failure in the case of Török et al., the paranoid attitude is converted into professional (and legal) failure in the case of Kurtz. When attitudes are pulled into the neatness of hindsight, they vanish or are converted into 'the wrong view.'

The case of Bruce Ivins , the case that I pursue at length in this Chapter, does not end so neatly as any of these. Ivins has no 'smoking gun' informant like Knapp, can see no easy way to plead out like Ferrell, and does not have the mental fortitude of Kurtz. Thus, Ivins commits suicide. Guilty or not, Ivins is the only one of these who is unable to survive to see his day in court. Unlike all the others, Ivins is in no position to assent to or to refuse the account provided by law enforcement. Instead the tables are turned; the DoJ must account for the corpse of Ivins.

Their accounting for his death, as I show below, amounts to an account of his guilt which relies primarily on a circular narrative that binds together the materials of his alleged crime and Ivins' inability to account for himself. This inference from ambiguous evidence is part of a novel paranoid narrative that is, in some ways, predicted by Weaver's speech on the house floor and, before him, McCarthy's challenge to the Army. There must be a madman, a terrorist, behind the mailings and the burden of proof otherwise is on the accused. Bruce Ivins is not up to that challenge.

In this chapter I provide a close reading of a cluster of artifacts relating to the 2001 anthrax mailings, a case referred to by the FBI and the DoJ as "Amerithrax." First I provide a brief description of the case's timeline: both a micro-timeline of the mailings and infections during 2001 and a macro-timeline that includes the investigation and criticism of it. After preparing this brief groundwork, I provide a close reading of the central document which has become the account of record for the investigation, the *Amerithrax Investigative Summary* (the *Summary*) released by the DoJ in 2010. In this reading I show how the *Summary* tells a story of Ivins' guilt that relies on a paranoid argument that succeeds primarily by reducing Ivins to two characteristics: his access to disease agents and his psychological difficulties (i.e. the irrationality of his motives). In short, forensic and psychological evidence cannot rule him out as a suspect, and in some versions of the (heavily contested) scientific narrative, the forensic evidence points directly to him. In the originating story told by Nixon in his rhetoric of defense, researching and possessing biological weapons is proof of irrationality, and the *Summary* applies a similar argument when talking about Ivins. In a paradoxical turn, the irrational actor that Nixon predicted emerges exactly within the very institution that Nixon claims the irrational actor requires. Further, the DoJ's account of Ivins' own motives includes his intent to carry out an

attack in order to perpetuate the need for defensive research. That is, Ivins generated a threat in order to make his own work important and necessary. Who would do such a thing other than an irrational actor, a madman, or a terrorist? This account is applied only to Ivins, because only Ivins' mind and behavior are laid bare by criminal investigators and consultant psychologists.

Before taking on the case, it is important to mark off several boundaries. First, it is not my claim in this chapter that Bruce Ivins was innocent, though I do present several sources which cast doubt on both Ivins' ability to create the infectious material used in the mailings as well as the so-called "conclusive" link between that material and Ivins' RMR-1029 flask. Instead, what I mean to demonstrate here is that if Ivins is guilty, then the *Summary*'s paranoid argument does not provide an obviously coherent case against him and may ultimately be unhelpful in its classification of Ivins as a bioterrorist. Second, it is not my claim that the *Summary* is a tool for an intentional miscarriage of justice or the result of gross incompetence, though Ivins' suicide does, at least, seem to be the result of both investigators and doctors acting in a deeply mistaken way. Instead, what I mean to demonstrate are the ways in which the *Summary* and its surrounding investigation are parts of a paranoid performance *par excellence*. What is especially interesting about the case of Ivins is that, unlike in the prior cases, the skeptic and the paranoid do not ultimately converge on a single history of the event. The Department of Justice and the National Academy of Sciences remain committed to disagree about both the evidence and what it means. However, as I show at the end of this chapter, the way in which skepticism is performed by the Academy scientists makes them vulnerable to a de-valuing argument which shares some of the same features of Török et al.'s explanation of the limits of disease science.

4.1 THE MAILINGS AND SUBSEQUENT INVESTIGATION[4]

In the weeks immediately following the September 11th attacks of 2001, a series of white-powder-laden envelopes were sent through the US Postal Service to addresses in New York, Florida, and Washington, DC. According to the postmarks on the letters that were recovered (several other letters are believed to have existed but were never recovered), letters were sent to media organizations in New York and Florida on September 18. A week later Robert Stevens, a photo editor for American Media in Boca Raton, Florida, felt ill and visits a series of doctors. He was first diagnosed with pneumonia, but later tests suggested the presence of anthrax in his lungs. His physicians gave a tentative diagnosis of inhalational anthrax on October 3rd. Stevens died two days later and his diagnosis was confirmed by the Florida State Laboratory Centers for Disease Control (CDC). In the first weeks of October, more letters were mailed to Tom Daschle and Pat Leahy at the Hart Senate Office Building. On the 15th, the Daschle letter was opened and, as a precaution, the Hart building was closed for several months for tests and decontamination. The Postmaster General and the Director of the FBI jointly offer a $1 million reward for "information leading to the arrest and conviction leading to the arrest and conviction for terrorist acts of mailing anthrax." [5] While no one working for the Senator became symptomatic (many staffers are given prophylactic antibiotics), nine postal workers in DC and

[4] The timelines provided here are drawn from two sources which overlap but describe the events slightly differently: National Research Council, Committee on Review of the Scientific Approaches Used During the FBI's Investigation of the 2001 *Bacillus Anthracis* Mailings, *Review of the Scientific Approaches Used During the FBI's Investigation of the 2001 Anthrax Letters* (Washington DC: National Academies Press, 2001):25-31; "Anthrax Case Timeline," *Journal of Health Communication*, 8 (2003):1-2. The former will be used frequently in the chapter and will be referred to, for convenience, as the *NAS Review*. Both are consulted because the former is often more specific about particular events (it provides the names of the individuals infected and details about the diagnoses) and it describes the stages of the investigation while the latter considers more events within 2001 (it provides the dates in which the individuals claim to have been infected).

[5] National Research Council, *Review,* 28, citing a *Fox News* broadcast.

New Jersey are diagnosed with anthrax. Two citizens die: Thomas L. Morris, Jr. and Joseph P Curseen, Jr. Whereas the human cause of Stevens' death was unknown, by the time these two men die, they were victims of a terrorist attack. Two others died from inhalational anthrax: Kathy Nguyen, a hospital worker in New York, and Ottile Lundgren, a woman in Oxford, CT. Both are believed to be connected to the mailings, but the specific sites of their exposure are not precisely known. In total, five individuals died of the twenty-two diagnosed with an anthrax infection. Thirty more are exposed (i.e. anthrax is detected on their person) but never became symptomatic. The five who died, Stevens, Morris, Curseen, Nguyen, and Lundgren, became the first five Americans to die from an act of "bioterrorism."

By 2002, the investigation into the mailings had become quite complex and involved primarily agents of the FBI and inspectors from the Postal Service who were brought together into the "Amerithrax Task Force."[6] In June, officials released to the Press news that, "20 to 30 scientists who might have the knowledge and opportunity to send the anthrax letters" were under scrutiny, and, in August, Attorney General John Ashcroft named Steven Hatfill, a former scientist at USAMRIID, a "person of interest."[7] Hatfill sued the government for violating his civil rights in 2003. According to the Task Force, forensic tests completed in 2007 ruled Hatfill out as a suspect[8] (Hatfill, however, was not officially cleared by the DoJ until August of 2008)[9]. Within the now smaller pool of suspects, the Task Force began focusing its efforts on Dr. Bruce Ivins, a USAMRIID scientist who helped develop many of the forensic techniques used in the investigation. They began their investigation covertly by searching his computers and placing

[6] Department of Justice, *Amerithrax*, 4.
[7] National Research Council, *Review*, 29
[8] Department of Justice, *Amerithrax*, 6.
[9] National Research Council, *Review*, 29

wiretaps on his home and work telephones. On November 1st, the FBI executed a search warrant on Ivins' home; on the 7th they raided his trash.[10]

For the next several months, Ivins was publically the prime suspect of the investigation and he began to deteriorate mentally. In March of 2008, Ivins' wife called 911 after finding Ivins unconscious, apparently passed out from a possible combination of valium and alcohol. Ivins was subsequently placed into a 28-day inpatient substance abuse and mental health program, but, after completing the program, Ivins was once again taken into custody after telling his therapist that he planned to "take out" his coworkers for abandoning him and then "go out in a blaze of glory."[11] While Ivins was under hospital care, the FBI raided his house (again) as well as his cars and office.[12] Against the recommendations of his therapist, the hospital released Ivins on July 24, 2008. Ivins overdosed on over-the-counter medication on July 26th and died on July 29th. In August, investigators held a series of press conferences to affirm Ivins' guilt and lay out the forensic case against him.

In the months following Ivins'death, the FBI and DoJ came under scruitiny for their investigation and the Director of the FBI announced that they would be requesting the National Academy of Sciences to review the forensic procedures used to link Ivins to the letters.[13] Thus, simultaneously, the Task Force began writing up their final reports on the investigation while the National Academy of Sciences (NAS) reviewed those reports. This created a struggle between the two groups, as information required for the review was not always available quickly or, in some cases, available at all.[14] Ultimately, the NAS committee judged the conclusions made by

[10] Department of Justice, *Amerithrax*, 61-62.
[11] *Ibid.*, 50.
[12] *Ibid.*
[13] National Research Council, *Review*, 30.
[14] *Ibid.*, xii.

the FBI about the forensic evidence against Ivins to be overstatements. Afterward, a brief rhetorical struggle played out between the two organizations about the relationship between scientific expertise and law enforcement that mirrors the tension described by Török in his descriptions of the Rajneesh botulism investigation. It was a struggle about what one should infer from ambiguous evidence; it was a struggle between attitudes.

The above account of the mailings and the subsequent investigation accord with the core narrative offered by both the NAS *Review* and the Department of Justice *Summary*. Instead, what was at issue between the two organizations was what the evidence in the case amounted to and what conclusions necessarily followed from that evidence. In the sections that follow, I lay out the major warrants that the FBI provides to support their assertion that Ivins is the sole culprit of the anthrax mailings. Importantly, the FBI argument comes in two forms: the form presented in the *Summary* and the form presented after the NAS *Review* is published. In the face of criticism by a group of scientists that the FBI specifically requested a review from, the FBI reframed their argument by repositioning the role played by scientific evidence in the Amerithrax investigation. The result was ultimately to downplay the value of the skeptical attitude when it comes to the interpretation of the investigation's the material evidence. The FBI attempted to obscure the paranoid aspects of the *Summary* by re-describing material links which were, in the first account, evidence against Ivins as 'leads.' As with the dangerous bases in the 1960's and the Rajneeshee poisoners in the 80's, the arguments and attitudes that led to a particular conclusion were judged to be less important than whether or not the given conclusion was currently agreed upon. Within the context of history, you are only seen as paranoid or skeptical if you are wrong. However, since Ivins died without confessing, the closure at the end of the case was much less substantial than it was in the other historical cases presented in earlier

chapters. The inferences drawn about Ivins remain the raw material for any and all arguments about Ivins' guilt. According to the FBI, what mattered was the evidence that investigators discovered as a result of their scrutiny of Ivins' life and behavior. However, as I explain below, that behavior was as ambiguous as the material links were, unless we accept a paranoid attitude and admit already that he was guilty. This is a practical impasse that the FBI could afford. A decade-long manhunt cannot end with that level of ambiguity.

4.2 DETERMINING RESPONSIBILITY

According to the *Amerithrax Summary*, the turning point in the investigation was the development of a scientific forensic technique – the genetic analysis of specific mutations in over 1,000 samples of *Bacillus anthracis*.[15] The *Summary* tells the story as follows:

> In its early stages, despite the enormous amount of evidence gathered through traditional law enforcement techniques, limitations on scientific methods prevented law enforcement from determining who was responsible for the attacks. Eventually, traditional law enforcement techniques were combined with groundbreaking scientific analysis that was developed specifically for the case to trace the anthrax used in the attacks to a particular flask of material. By 2007, investigators conclusively determined that a single spore-batch created and maintained by Dr. Bruce E. Ivins at the United States Army Medical Research Institute of Infectious Diseases ("USAMRIID") was the parent material for the letter spores. An intensive investigation of individuals with access to that material ensued. Evidence developed from that investigation established that Dr. Ivins, alone, mailed the anthrax letters.[16]

The timeline offered in the story is important because it structures the core warrants for Ivins' guilt: investigators scientifically determined that Ivins had access to the anthrax material and

[15] *Ibid*., The narrative that locates the importance of the technique is introduced on the first page of the *Summary* while the technique itself is explained generally on p24-25. A detailed discussion and critique of the techniques used are the subject of the *NAS Review* (National Research Council, *Review*, *9*7-150.)

[16] Department of Justice, *Amerithrax*, 1.

subsequent investigation turned up other evidence (unexplained here) that establish Ivins' guilt. Later, I will describe how the NAS cast doubt on the first part of this story – that the scientific analysis does "conclusively" determine its origin. First, however, I will lay out the other evidence that the Task Force says developed out of the investigation into individuals with access to the relevant bacteria. As I will demonstrate, there is a crucial ambiguity between the evidence that *establishes* Ivins' guilt and things that can be taken as evidence when Ivins' guilt is assumed. As with the happenings around military facilities during the 1960's, what warrants us in saying that an accident (in this case, an attack) came from *here* often requires that we have already decided what kind of place (in this case, what kind of person) *here* is. That is, evidentiary gaps require attitudinal responses.

In order to characterize what kind of person Ivins is (a person deserving of our suspicion), the *Summary* devotes much space to stories and speculation about Ivins' mental state. This emphasis on psychology stands against the reports initial narrative (above) which emphasizes the links made by scientific forensics. The *Summary*, ignoring front matter, fills ninety-two pages. Of this, almost half is made up of descriptions of Ivins' mental health or descriptions of his apparent psychological state. In order to explain the need to dwell at length on Ivins' mental state, the *Summary* explains that, "Dr. Ivins's profound mental health struggles provide both a context for his motive to commit the crime and an explanation for how this person could commit such a horrific and tragic offense."[17] However, an examination of the *Summary*'s account of Ivins' motives and the evidence for his mental health problems uncovers a series of difficult puzzles, apparent contradictions, and seemingly circular arguments asserted with apparent self-awareness. Much of the case's overall force seems to rest on whether or not we

[17] *Ibid.*, 8.

find Ivins to be an appropriate object of suspicion. If there are warrants for being suspicious of Ivins, they rest either in the behavioral or forensic evidence against him. Because of the complex nature of the case, both types of evidence are deeply ambiguous. In sum, attributing guilt to Ivins will require an attitudinal shift into the paranoid. Ultimately, I argue, the most significant site of work for the paranoid attitude is Ivins' mental health, and in some parts of the *Summary* it seems that Ivins' mental instability is both necessary and sufficient to explain his alleged actions. In what follows, I show how the *Summary* speaks with a paranoid attitude and uses ambiguous stories about Ivins' behavior to either demonstrate how Ivins might have committed the crime or prove that he actually did. A close reading and consideration of the various claims in the *Summary* suggest that the psychological evidence is evidence that Ivins is the kind of person capable of bioterrorism; he is the irrational actor. However, the evidence of his unpredictability is converted into evidence that he has done the unpredictable thing. He is not just possibly a terrorist; he is actually one.

4.2.1 Ivins' Suspicious Accusations

The most interesting pieces of evidence with the paranoid account of Ivins' guilt can be found in the self-explanatorily titled section called "Dr. Ivins Made Many Statements, and Took Many Actions, Evidencing his Guilty Conscience."[18] Here, a series of things that Ivins did and said are explained as evincing that Ivins was acting defensively in the face of investigators. Essentially, he was working too hard to demonstrate his own innocence. Within these anecdotes, the paranoid attitude is on full display. Not only does the *Summary* draw strong conclusions

[18] *Ibid.*, 64.

from highly ambiguous evidence, but it draws those conclusions in the face of a highly visible alternative explanation: Ivins' mental health problems. It is, of course, no contradiction to suggest that Ivins was *both* mentally ill *and* guilty. However, a question remains: when Ivins behaved in a strange way, what fact will settle whether his mental illness or his guilt was the cause of his behavior? If Ivins were able to speak, it seems unlikely that he could tell us or, given his mental illness, we could believe what he told us. There is, of course, no fact that will settle the matter – investigators were forced to make a judgment. What settled the matter was a fact about them.

As a representative anecdote about Ivins' so-called guilty conscience, consider an email that Ivins sent to himself in 2005 in which he documented twelve reasons why two of his colleagues are good suspects for the anthrax mailings. A printout of this email was recovered during the execution of a search warrant of Ivins' house in November, 2007, though the email itself was by then two years old.[19] The *Summary* describes the email as "speculating" and "illogical."[20] Further, the *Summary* claims that the memo amounts to Ivins' claiming that the two colleagues "together mailed the anthrax letters in an effort to get back at him."[21] Two relevant questions emerge: (1) what is illogical in his speculations and (2) where did Ivins suggest that the primary motive is revenge on him?

If Ivins' speculative accusations are illogical, it is hard to see how they might be founded on invalid reasoning as they are structurally identical to the official accusations against him. For

[19] *Ibid.*, 72.

[20] *Ibid.*, The *Summary*'s usage includes scare quotes around "speculating"– the portions of the email quoted in the report never include the word speculation. Instead, the email uses the phrase "seriously wondering." The *Summary* uses forms of the word "speculate" seven times. Five instances refer specifically to Ivins accusing someone of the mailings, one instance refers to laboratory personnel being suspicious of the FBI, and one instance is used in a scientific context so as to mean something like 'not yet conclusive.' It seems clear that the scare quotes on 72 are meant to suggest speculative as in 'wildly' so, or with paranoia.

[21] *Ibid.*

example, Ivins' claims that the two colleagues, "made the finest preparations of anthrax," and had done so on "countless" occasions.[22] Further, the email states that the colleagues had the "opportunity" to make the spores (the details of that opportunity are either not in the email at all or merely not quoted in the *Summary*) and one of the colleagues was "extremely familiar with the Northeast," the region from which the letters were known to have been mailed.[23] Finally, Ivins explains that the colleagues had "twin motives of revenge on her supervisor and giving her career a boost." The revenge would have been in response to confrontation that Ivins' references while the career boost refers to the fact one of the colleagues took a job in the private sector in the year following the anthrax mailings.[24] He goes on to qualify his speculations by saying "this is a theory, not an accusation."[25] He concludes the email with "[a]gain, this is just an idea, but it's an idea that makes sense."[26]

It must be admitted that claiming a colleague would carry out the anthrax mailings even partly as an attempt to get revenge on Ivins seems paranoid. However, not only did the psychologists who consulted with the FBI on Ivins attribute these same motives to him (revenge and professional redemption)[27], but the *Summary* is also quick to note that even Ivins readily admitted that the email was the product of a side of himself he called "'Crazy Bruce,' who

[22] *Ibid.*, 72.
[23] *Ibid.*
[24] *Ibid.*
[25] *Ibid.*, 73. What remains an unexplained puzzle in the email is why Ivins wondered about how the colleagues "weaponize the spores into a powder" – he conjectures that they would have needed "outside assistance…who would have biochemical/pharmaceutical experience." In 2005, it was suspected that the spores had been weaponized into a powder, but later lab tests revealed that the spores were not weapons grade at all (*Ibid.*, 8). Why would Ivins wonder to himself about an issue that, as the attacker, he would know to be irrelevant? This remains unexplained in the *Summary*, though since Ivins is already assumed to be unpredictable and unexplainable, such a puzzle needs no explanation in the context of the case.
[26] *Ibid.*
[27] Expert Behavioral Analysis Panel. *Report of the Expert Behavioral Analysis Panel*. Vienna, VA: Research Strategies Network, (2001): 123-124, accessed November 20, 2014, http://researchstrategiesnetwork.org/expert-behavioral-analysis-panel-amerithrax-case/.

surfaces periodically as paranoid, severely depressed and ridden with incredible anxiety."[28] So, Ivins admitted in the context of the email itself that his speculations are not entirely conclusive and subsequently admitted that the entire accusation was fueled by a paranoid episode, yet the *Summary* presents the email as if it is proof that Ivins is guilty of committing the attacks themselves. What fact about this accusation is meant to turn this story into a warrant for guilt? By taking a broader view, the role of paranoia in this ascription is easily seen. In 2002, one of Ivins' former colleagues actually accused him of having done the mailings (the FBI had already ruled Ivins out at that time).[29] By 2005 (when the email was written), the FBI had already named Steven Hatfill, a former colleague of Ivins, a person of interest in the investigation and had subsequently begun investigating all the USAMRIID employees who had the relevant expertise to handle anthrax. Researchers who were present at USAMRIID during the investigation later reported that the FBI actively invited the researchers to accuse one another, so weren't Ivins' accusations exactly what the Task Force was hoping for?[30] This hardly amounts to a critique of the investigators. Within the context of an investigation, some people are not appropriate objects of suspicion because they are ruled out. Ivins' accusations against his colleagues only evince to us if we can already imagine him as guilty. The accusations are not self-explanatorily evidence of anything. Ironically, Ivins was judged to be inappropriately paranoid even though he wrote the email at a time in which he was not under suspicion.

Perhaps it is the outlandish nature of the accusations that makes them stand out as evidence. However, the *Summary* never disputes that the colleagues in question had the relevant

[28] *Ibid.*
[29] Expert Behavioral Analysis Panel. *Report*, 82.
[30] Steven Engleberg, Greg Gordon, Jim Gilmore, and Mike Wiser, "Did Bruce Ivins Hide Attack Anthrax from the FBI?" *Propublica*, October 10, 2011, accessed November 20, 2014, http://www.propublica.org/article/did-ivins-give-the-fbi-a-fake-sample-of-his-own-anthrax.

technical expertise and instead points out that when interviewed, neither colleague "could recall an occasion when Dr. Ivins was so upset with them" as he portrays in the email.[31] Thus, perhaps his accusations are "speculative" because the people he accuses deny the circumstances surrounding those accusations, yet this seems to be precisely what Ivins himself is doing. The difference here is that the colleagues, in 2007, are not persons of interest in the investigation, they are not appropriate objects of suspicion. Finally, because neither the Task Force nor Ivins deny Ivins' penchant for paranoid, a possible double-bind emerges. Either Ivins' is in fact paranoid and the accusation is just a symptom of the paranoia (and not a symptom of guilt) or Ivins is not in fact paranoid and is merely manipulative (thereby doing damage to the Task Force's claim that Ivins himself was motivated by his own paranoia). It would seem that the *Summary* sees a third way – Ivins is both truly mentally ill and an also a systematic manipulator.

What we conclude based on our knowledge of Ivins' mental health problems is a key issue, and the Task Force may only be in a double-bind if there is some need for Ivins to be a coherent, rational actor. No such need exists. As shown in previous chapters, the person capable of these kinds of acts is Weaver's madman or Nixon's irrational actor. The nature of the bioterror act itself seems to self-evidently require a kind of person who is at once unreasonable and calculated. Ivins meets a key part of these necessary criteria since he, as a clinical paranoid, is the kind of person who *could* do terrible things. However, in the *Summary* this necessary criterion seems at times transformed into a sufficient criterion to demonstrate that Ivins is capable of *anything*, including and especially the irrational and the paranoid. A skeptic might reasonably conclude that it is unremarkable that a clinical paranoid demonstrates paranoia; it is a symptomatic confirmation of his diagnosis. To the paranoid, however, Ivins serves as

[31] Department of Justice, *Amerithrax*, 73.

confirmation of something else, confirmation that he is an appropriate object of suspicion. Thus the *Summary* filters nearly all of Ivins' behavior through his unpredictable mental illness in order to make his behavior at every turn suspicious, irrational, and fitting of the crime at hand. To be clear, I am not suggesting that this is necessarily a kind of clever manipulation on the part of the FBI. The FBI need not be manipulators any more than the skeptics and paranoids of previous anecdotes Foster, Weaver, McCarthy, etc.

Thus, a remarkable parallel emerges here between the *Summary* and Ivins and their respective brands of paranoia. By looking at a single piece of discourse, it becomes quite difficult to tell which argument originated from the clinically paranoid. The structural similarity between Ivins' accusations against his colleagues and the Task Force's accusations against Ivins shows how easily evidence can be treated as vacuous to one audience and as significant to another. Finally, as shown in the final example, for both Ivins and the *Summary*, it is important how the accused party responds to accusations. At issue in this case (and the cases of Kurtz and the Rajneeshee) is materials or action, but Ivins' ability to account for his actions.

Ivins' accusatory email[32]	The Summary describing Ivins[33]
". . . made the finest preparations of anthrax spores"	"Dr. Ivins was among the very few anthrax researchers nationwide with the knowledge and ability to create the highly purified spores used in the mailings."
"made countless preparations of anthrax spores."	"he personally conducted and supervised Ames anthrax spore productions for over two decades."
"is extremely familiar with the Northeast, and the letters were mailed from the Northeast."	"The anthrax letters were mailed from a collection box outside of an office building that housed a particular sorority with which Dr. Ivins was admittedly obsessed."
"Since [the attacks] her career has moved upward rapidly."	"Short of some major breakthrough or intervention, he feared that the vaccine research program was going to be discontinued. Following the anthrax attacks, however, his program was suddenly rejuvenated."
"was dishonest when confronted by me with questions concerning the above situation."	"he was unable to provide reasonable or consistent explanations for his behavior."

Figure 1 A Comparison of Ivins' and the FBI's accusations

Having skills related to anthrax preparation is not a surprising fact. It is only relevant when the person with the skills *is a certain kind of person*. Having a circumstantial connection to the mailbox through which the letters were mailed is a relevant fact only when the connection is to *a certain kind of person*. [34] Experiencing career success in the wake of a crisis is a coincidence, but seeing a public health catastrophe as a reasonable way to advance in your career is possible for *a certain kind of person*. Any person whose career is built on the production and study of anthrax shares the appropriate material links with Ivins, but Ivins was special. What makes him special is not always clear, but it seems always to trace back to his mental instability

[32] *Ibid.*, 72-73.
[33] *Ibid.*, 8, 26, 10, 8, and 12 respectively.
[34] "Strong circumstantial links" exist between the mailbox and Ivins. *Ibid.*, 90.

and his inability to 'account for himself' (these may be the same thing). In this way, Ivins is like Detrick for McCarthy, Rajneeshpuram for Weaver, and Kurtz's artwork for the FBI: self-evidently the origin of bad things. Asking for proof of the self-evident is a difficult proposition.

4.2.2 Decoding Ivins' Terrorist Acts

With all the psychological evidence against Ivins, it is easy to forget that the Amerithrax case is not classified as a string of serial killings or assaults but as a "bioterrorism attack."[35] Within the *Summary*, variants of the term bioterror appear four times. Twice when describing the case in very broad terms. The *Summary* explains that, "[t]he ensuing criminal investigation was extraordinarily complex, given the possible breadth and scope of this bioterrorism attack."[36] It further explains that, "[a] bio-terrorism attack presents inherent challenges for criminal investigators."[37] Later, in more specific terms, it describes an individual who was investigated because they, "possessed a keen interest in the weapons application of the Ames strain, biological terrorism scenarios."[38] Finally, the *Summary* contains a mention of the term from Ivins himself. It quotes an email written by Ivins to a former colleague in which Ivins noted that, "with people in high places talking about BW terrorism being likely, your knowledge, skills and abilities could be a real asset."[39] "Terrorism" is referred to an additional twelve times; almost all of these are descriptions of the Task Force describing their own inability to link the mailings to state-sponsored or Islamic terror groups[40] and the rest are quotations from emails from Ivins

[35] *Ibid.*, 4.
[36] *Ibid.*, 6.
[37] *Ibid.*, 11.
[38] *Ibid.*, 18.
[39] *Ibid.*, 65.
[40] *Ibid.*, 5, 11, 12, 16, 18.

used as evidence.[41] Interestingly enough, none of these references directly describe Ivins directly as a terrorist. Instead, Ivins is said to have "perpetrated the attack"[42] or "committed the crime."[43]

Thus, while the inference is available (if Ivins perpetrated the attack and the attack is a bioterror attack, then the bioterrorist must be Ivins), the direct description is absent and avoided. This seems strange given how much of the *Summary* is focused on a description of Ivins. Perhaps, then, it is wrong to say that the mailings are bioterror attacks *because* Ivins was a terrorist who used bioweapons (this would be fitting within Carus' framework). What, then, warrants us including the Amerithrax case in the category of bioterror attacks along with the re-described Rajneesh food poisoning case? As detailed in Chapter 1, legal definitions of bioterrorism in the United States contain a rhetorical asymmetry. That is, while the construction of the term itself suggests that bioterrorism is a sub-specie of terrorism, legal definitions after the passage of the PATRIOT Act on October 26th, 2001 show the category to be differently constrained. That is, while "domestic terrorism" includes a motivational component, the use of a weapon of mass destruction is a sufficient component for a charge under the terrorism statute. After the PATRIOT Act a biological agent qualifies as such a weapon. Thus, there is a definitional shift that is invisible in the press releases by the government. Chronologically, the case is defined as being an act of terror long before any criminal actor is located. While some politicians and journalists speculated a connection between the mailings and Iraq and/or Al Qaeda, the Task Force focused its attention on US citizens. How the FBI handled the characterization of the act as terrorism in the wake of the mailings and subsequently re-

[41] *Ibid.*, 9, 65.
[42] *Ibid.*, 1.
[43] *Ibid.*, 6.

articulated that characterization is detailed below. Importantly, since Ivins was never charged with a crime, the definitional burden on the *Summary* is quite low.

During the first few months after the attacks, releases from government officials and the media were, at first, ambivalent on the link between the attacks and terrorism. On October 14th, 2001 *The Guardian* ran a story titled "Iraq 'Behind US Anthrax Outbreaks'" which detailed a series of hypothetical links between the mailings and Saddam Hussein but then qualify those links by explaining that, "[s]ome observers fear linking Saddam to the terrorist attacks is part of an agenda being driven by US hawks eager to broaden the war to include Iraq."[44] Meanwhile, in a press conference on October 16th, 2001 (the FBI's first press release on the mailings), FBI Director Mueller explained that, "while organized terrorism has not been ruled out, so far we have found no direct link to organized terrorism."[45] Yet, in a joint press conference two days later Mueller, responding to a request for clarification, explained that "the mailing of anthrax is a terrorist act. It is a terrorist act. And we are pursuing it as a terrorist act."[46] Director of Homeland Security Tom Ridge reinforced this characterization several days later at another press conference:

> Well, whether it's -- they are a group of isolated attacks or a collective attack, I mean, we just view those individuals, whether they be foreign or domestic, who work either in concert with one another or independently as terrorists. I mean, the FBI is moving as aggressively as they can, the Postmaster General has his own inspection crew. We have drawn no conclusion about that, but we stand by our statement they are terrorist acts.[47]

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[44] David Rose and Ed Vulliamy, "Iraq 'Behind US Anthrax Outbreaks,'"*The Guardian*, October 14, 2001, accessed November 20, 2014, http://www.theguardian.com/world/2001/oct/14/terrorism.afghanistan6.

[45] FBI National Press Office, "Statement of Director Mueller on FBI Investigations into Anthrax Exposures and Suspected Anthrax Exposure," Press Release, October 16, 2001, accessed November 20, 2017, http://www.fbi.gov/news/pressrel/press-releases/statement-of-director-mueller-on-fbi-investigations-into-anthrax-exposures-and-suspected-anthrax-exposure.

[46] Office of the Press Secretary, "Director Ridge, Leaders Discuss Homeland Security," Press Release, October 18, 2001, accessed November 30, 2014, http://georgewbush-whitehouse.archives.gov/news/releases/2001/10/20011018-1.html.

[47] Office of the Press Secretary, "Director Ridge Discusses Anthrax Situation," October 22, 2001, accessed November 30, 2014, http://georgewbush-whitehouse.archives.gov/news/releases/2001/10/20011023-1.html.

From the point of view of the investigators, then, the message is clear. We do not know who they are, but we know that they have committed acts of terror. We are dealing with terrorists, but probably not organized terrorists. While legal and academic definitions of terror often isolate motives as the key difference between terrorism and the merely criminal, Mueller's statements demonstrate the ways in which actions apparently speak for themselves. Thus, we should take Mueller's earlier statements to mean that terrorism itself is ruled-in, it is just a matter of discovering the relevant sort of terror that we're dealing with.

Once investigators recovered several of the letters used in the mailings, the link to terrorism was further solidified. The letters clearly made reference not only to terrorism in general, but 9/11 in specific. Below, the text of the recovered letters is reproduced:

Letters to the New York Post and Tom Brokaw:[48]

09-11-01
THIS IS NEXT
TAKE PENACILIN NOW
DEATH TO AMERICA
DEATH TO ISRAEL
ALLAH IS GREAT

Letters to Senators Leahy and Daschle:

09-11-01
YOU CAN NOT STOP US.
WE HAVE THIS ANTHRAX.
YOU DIE NOW.
ARE YOU AFRAID?
DEATH TO AMERICA.
DEATH TO ISRAEL
ALLAH IS GREAT.

[48] The misspelling of penicillin as "PENACILIN" appears on both letters. That the term is misspelled takes on special meaning for the Task Force, as explained below.

The *Summary* suggests that the actual text of the letter demonstrates that the mailer or mailers were not "true jihadi[s]" because such a person would have ended the letters with the phrase "Allah Akbar" as opposed to "Allah is Great."[49] What this amounts to, however, is the suggestion that a true jihadi would have written the entire message in Arabic.[50] So, either the domestic terrorists are aping the jihadi message or are using it as a smokescreen. Since the Task Force claims that Ivins committed the attacks as part of an attempt to save his career, then the text of the letters is only important as part of his manipulation. We might imagine that Ivins used common descriptions he had heard from the media and simply did a poor job putting the notes together because their content was primarily designed to "send the investigation far afield."[51] Whereas many of Ivins other activities are explained away by his paranoia or as acts of his 'guilty conscience,' the text of the letters becomes an object of intense scrutiny. The *Summary* takes great pains to link the text of the message to Ivins and convert it into not a product of his manipulative tendencies, but as a product of his most deeply paranoid and obsessive urges. Again, the *Summary* takes Ivins' mental illness as an established fact, but the way that the *Summary* uses his mental illness to explain his other behavior is often quite surprising. In what follows I detail how the Task Force uses textual analysis to 'decode' Ivins, thus fitting the content of the seemingly jihadist letters into the paranoid narrative.

As I suggest above, one might think that the mailer would have aped the letter content by merely reusing language gathered from the press. Indeed, immediately after 9/11 a host of

[49] Department of Justice, *Amerithrax*, 57.

[50] In December of 2001, a tape of Osama Bin Laden speaking to an unknown Shaykh was released to the US Media and translated by a member of the diplomatic language services and a Professor of Arabic at Johns Hopkins. In that video the Shaykh is transcripted and translated as saying "Allah is great," repeatedly. An English transcript of the speech is archived by Washington Post Online: "Text: Bin Laden Discusses Attacks on Tape." Washington Post, trans. George Michael and Kassem M Wahba, last modified March 8, 2002, accessed November 20, 2014, http://www.washingtonpost.com/wp-srv/nation/specials/attacked/transcripts/binladentext_121301.html.

[51] Department of Justice, *Amerithrax*, 57.

newspapers published articles which extended the worry about terrorism to biological and chemical terrorism. During the fourteen days immediate after the 9/11 attacks (before the anthrax mailing story broke) the *Wall Street Journal*, *Washington Post*, *Los Angeles Times*, *New York Times*, and the *Christian Science Monitor* all published stories describing the potential terror risk surrounding anthrax and sarin gas.[52] It is perhaps unsurprising then to learn that Ivins sent an email to one of his former colleagues in which he says "I have just heard tonight that the Bin Laden terrorists for sure have anthrax and sarin."[53] The Task Force argues that this email from Ivins demonstrates a link between his own writing and the writing in the letters.

According to the *Summary*, the writing in the letters is similar to the Ivins' own writing in two regards. The direct comparison made in the *Summary* proceeds as follows:

9/26/01 e-mail:	"I just heard tonight that the Bin Laden terrorists for sure have anthrax and sarin gas."
Letters to Daschle/Leahy: (postmarked 10/9/01)	"We have this anthrax."
9/26/01 e-mail:	"Osama Bin Laden has just decreed death to all Jews and all Americans."
All four anthrax letters:	"Death to America, Death to Israel."

> This e-mail was sent before the letters were discovered, so Dr. Ivins could not possibly have been subconsciously parroting what he heard about the letters.[54]

The *Summary* suggests that the postmarks matter because Ivins had written the email before the letters were written, therefore it is impossible that the letters cause Ivins to speak in such a way. True enough. Is it not equally plausible that the news media caused both? This hypothesis is not

[52] A search of the ProQuest *National Newspapers Core* database for articles containing keywords "terrorism" combined with either "sarin" or "anthrax" yields 33 distinct articles across these five publications. Eighteen of that set mention either Bin Laden or Iraq. Five other articles were published that refer to biological terrorism or bioterrorism absent these specific weapons. This specific set of searches is only meant to provide evidence for the claim that the idea of a biological terror attack was immediately part of the post-9/11 public conversation.

[53] Department of Justice, *Amerithrax*, 58.

[54] *Ibid.*

pursued and ruled out. Equally tenuous is the link between the statements concerning America and Israel/the Jews. In the conclusion of Osama Bin Laden's 1996 fatwa, "Declaration of War against the Americans Occupying the Land of the Two Holy Places," he calls upon muslins to fight against two enemies: "the Americans and the Israelis."[55] Thus, neither phrase is original to Ivins. Surely this sets the bar too high – we need not prove that the text of the letters are total original creations of Ivins, such a thing would be impossible. The aim of the *Summary* is to draw a link between Ivins and the letters, and such a link is surely drawn. The relevant question is whether or not that link is substantial and unique enough to count as evidence against him, and there is no fact that will help draw that line. As the *Summary* shows far more profoundly below, when we go looking to make connections between texts we will find connections. What the connections mean, however, requires further interpretation, but the paranoid and the skeptic both circumvent further interpretation in favor of a self-evident conclusion.

That this link is tenuous does little damage to the Task Force's overall argument. The *Summary* admits that much of the case is circumstantial. Still, the *Summary* presses further in drawing the link between Ivins and the letter. While the analysis of the words in the letters is meant to show how Ivins was capable of writing such a message, a further analysis by the Task Force shows how the message carries within it a deeper, hidden meaning uniquely relevant to Ivins. That such a hidden meaning exists in the messages further links it to Ivins, the *Summary* argues. In order to uncover the hidden meaning The Task Force attempts to decode the letters just as they have decoded Ivins' suspicious behavior. The analysis that the FBI carries out is both fascinating and dizzying; I detail the steps of the analysis at length in what follows.

[55] Bin Laden, Osama, "Declaration of War against the Americans Occupying the Land of the Two Holy Places," August 23, 1996, accessed November 20, 2014, http://www.pbs.org/newshour/updates/military/july-dec96/fatwa_1996.html.

According to the *Summary*, the Amerithrax letters have no fewer than four levels of symbolic content within their messages: the literal message, a message in the form of a series of genetic codons, a further message in the form of the single-letter designators for those codons, and a final interpretation of the resulting letters. In order to 'see' the final message, the *Summary* explains that one must understand several things about Ivins. First, as a biochemist, Ivins "was familiar with codons," the technical name for triads of nucleic acids within a DNA strand. [56] Each codon functions like a three-letter word which correlates to a specific amino acid, and each amino acid has a further single-letter designator for use as shorthand. Thus, any strand of DNA that codes for a particular protein can first be reduced to codons and then reduced to single-letter designators. The *Summary* proposes that such a code can be found within the letters if one pays close attention to the fact that certain characters in the anthrax letters are "bolded." Below, working from an image of the letter sent to Tom Brokaw, I demonstrate the decoding process. Though it is not said explicitly in the *Summary*, the letters to Senators Daschle and Leahy cannot be submitted to the same analysis as the handwriting is slightly different and does not contain the over-written, "bolded" letters nor do they contain the misspelled word "PENACILIN" which, as explained below, is meant to have particular significance in the decoding process. Thus, at best, the coding process used here is only applicable on a subset of the recovered letters which were, in turn, a subset of the total letters sent out.

[56] Department of Justice, *Amerithrax*, 59.

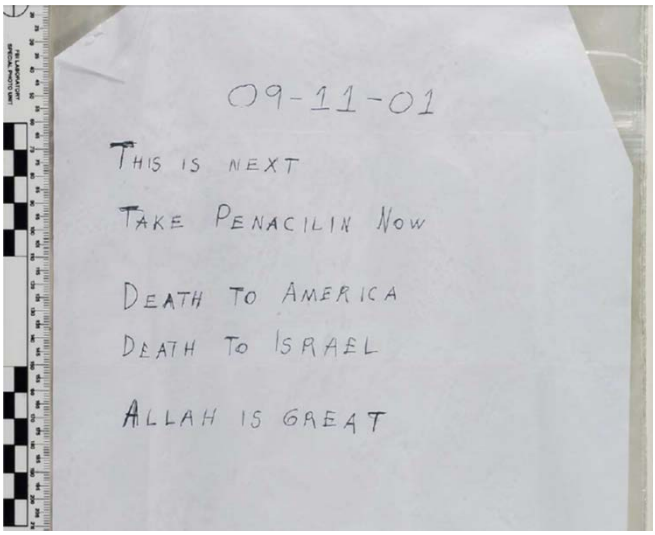

Figure 2 *The Brokaw Letter*[57]

Close visual examination of the image does reveal that some letters are darker than others and seem to have been traced over more than once. According to the *Summary*, every "T" and several of the "A"s are bold enough to be counted as part of the "hidden message." Seen this way, a series of codons emerges: TTT AAT TAT. This message is also a code because each of these codons correlates to an amino acid: Phenylalanine, Asparagine, and Tyrosine (respectively). This, according to the *Summary* provides material for, "two possibile [sic] hidden meanings."[58] The first is derived by reducing each amino acid to its first letter and creating an acronym. Thus, Phenylalanine, Asparagine, and Tyrosine become PAT. Alternatively, the list can be reduced to the single-letter designator shorthand. In that case, Phenylalanine, Asparagine, and Tyrosine becomes FNY. From the letter, crafted to look like a jihadi message, two possible, related messages emerge: PAT and FNY.

That these are 'messages' at all is not obvious without more explanation. However, the Task Force explains that Ivins' torturous relationship with his two former colleagues (the

[57] *Ibid.*,, Exhibit A. A gallery of all the Exhibits cited in the *Summary* is available at http://www.justice.gov/amerithrax/

[58] *Ibid.*, 60.

colleagues he earlier speculated might have done the mailings) offers simple explanations. One of Ivins' colleagues was nicknamed "Pat;" the first decoded message is a name. Ivins frequently disparaged the city and people of New York in emails to the other colleague; the second decoded message is an insult directed at the city to which the letters were actually mailed. Thus, many levels beneath the fake jihadi message, underneath a layer of scientific jargon, lies the tell-tale signs of Ivins' various paranoid obsessions.

Why would Ivins bury a message like this deep within the letters, especially if, as the *Summary* argues, the letters were meant to be a red herring? The answer to this question is identical in structure to the explanation of Ivins' motivations for mailing the letters at all. Ivins is capable of such behavior and was the kind of person who would be driven to do such a thing. In the section titled "Dr. Ivins' fascination with codes," the *Summary* lays out Ivins' obsessive interest in "secrets, codes, and hidden messages."[59] Decades ago, Ivins developed an obsession with the Kappa Kappa Gamma sorority which he satisfied by breaking into two different KKG sorority houses in order to steal their book of sorority rituals and its corresponding cipher (the book is written in code).[60] The *Summary* explains that Ivins told investigators that he did this as a display of power and revenge. He had the power over their codes and could release them to the world. The *Summary* further cites an email to one of his former colleagues in which Ivins explains that,

> For me, it's a real thrill to make a discovery, and know that I've just revealed something that no one else in the world ever knew before. I feel like a detective, and that which is unknown dares me to try to find out about it, to decipher its code, to understand it, to fit it into the puzzle or "Big Picture."[61]

[59] *Ibid.*, 60.
[60] *Ibid.*, 10, 60-61.
[61] *Ibid.*, 61.

In an ironic reversal, the Task Force does the same to Ivins by discovering the perverse messages within the anthrax letters that one else in the world ever knew before. Just as investigators were able to demonstrate their ability to outwit Ivins on the field of scientific forensics, they were able to lay open his every behavior and message.

Just as Ivins needed a cipher to crack the KKG code, the Task Force needed such a cipher to decode Ivins. After executing a search warrant at his house, the FBI watched Ivins to see what he might throw out. That is, the investigators assumed that if they missed something significant, Ivins might throw it out in order to hide it from future searches. Among the items that Ivins threw out that night was a copy of *Gödel, Escher, and Bach* by Douglas Hofstadter.[62] Investigators note that Ivins excitedly loaned the book to friends on numerous occasions (thus, they found it suspicious that he would discard it) and that Ivins double-checked his trashcans to make sure that the garbage had indeed been taken away. These observations led them to conclude that Ivins was attempting to destroy evidence, but it was not immediately clear why the book was important. In the book, Hofstadter, a cognitive scientist, explains how meaning emerges from systems and demonstrates, through word games, how meaning can be made and embedded within messages on multiple levels. Indeed, one of the types of codes that Hofstadter discusses is DNA, and the book includes numerous references to and word games using the language of nucleic acids. Thus, the Task Force attempted to use Hofstadter's book (which Ivins possessed) to reverse engineer the message, 'discovering' the meaning within.

The FBI uses Ivins' past obsessions to demonstrate that Ivins is both capable of and predisposed to coding and decoding, and then use one of his own books to "uncover" a "hidden" meaning in the anthrax mailings that is meant to link Ivins to the crimes in question. However,

[62] *Ibid.*, 61.

some challenges emerge in the decoding process. In concluding the explanation of the hidden messages (FNY and PAT), the *Summary* notes:

> It was obviously impossible for the Task Force to determine with certainty that either of these two translations was correct. However, as the discussion that follows makes clear, the key point to the investigative analysis is that there is a hidden message, not so much what that message is.[63]

This seems to present a puzzle. By this explanation, we are meant to conclude that since the Task Force was able to make up a possible deeper meaning, then there is indeed a deeper meaning. This seems to be an inversion of a claim that Hofstadter makes in his book – senders cannot ensure that messages are received. Hofstadter suggests that intending to send a message is not sufficient to ensure its reception. The Task Force suggests something very different and far less clear, that receiving a message is sufficient to demonstrate that it was intentionally sent. In support of this distinction is the fact that when Hofstadter himself was consulted on the case he was skeptical of the 'hidden message.' After finding Hofstadter's book and applying its methodology, the FBI visited Hofstadter and went over the messages and their interpretations with him. Hofstadter spontaneously generated a series of ways to read the letters, but ultimately told the investigators that they were "making too much out of trying to find a message." As Hofstadter debated with the agents about which letters should count as "bolded" and whether a particular reading method was obvious to someone not looking for something specific, he told the agents that "the more you look, the less clear it is."[64] That Hofstadter thought the reading was unsound does not appear in the *Summary*.

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[63] *Ibid.*, 60.

[64] A declassified report of this meeting with Hofstadter was released via FOIA and is archived in the "Amerthrax Vault," a series of 59 documents varying widely in length and organization archived at http://vault.fbi.gov/Amerithrax/. The report in question can be found on pages 18-23 of "Amerithrax part 02 of 59." In the report, Hofstadter's name is redacted (like the names of all individuals in the documents besides Ivins). However, in the report the unnamed person refers frequently to and is treated as an expert on *Gödel, Escher, and*

However, as with the email accusations, the starting point for interpreting any evidence is not the evidence, per se, but Ivins as an object of suspicion. Ivins, who was obsessed with codes, would have left a code. We can find a code. That Ivins left a code is not the conclusion of this short argument, but the first premise. It is a matter of fact that we might not be able to understand the message, but this is through no particular fault of our own. We, after all, are rational actors and Ivins is not. His motivations and actions need only be accounted for insofar as we they can be shown to be impossible for Ivins to account for. Even Hofstadter, who, by the FBI's account, provided Ivins with the tools for encoding the letter, is in no position to confirm or deny one particular interpretation of Ivins' letter. Who is he to say there is no message? He could not, after all, have known what kind of person Ivins was. The Task Force knew better because they have a proper understanding of Ivins that helps do interpretive work on the evidence that simply cannot speak on its own. The dialog between the FBI and Hofstadter serves as yet another exemplary case of the skeptical and paranoid attitude in negotiation. Hofstadter, the expert scientist and skeptic, explains and demonstrates how judgment-laden the Task Force's interpretive process is, but such an objection assumes that the Task Force is looking for a judgment-free way of looking at the evidence. Just as in the cases of Dugway and the Rajneesh, the proof is uncertain and the scientists will be unable to make the interpretive leap. Their worry about certainty misses the point. By ignoring the appropriateness of the object of suspicion, they fail to see how the possible is not only plausible but likely.

Bach. Hofstadter himself supports my interpretation of the report as well. (Douglas Hofstadter, e-mail message to author, January 18, 2014).

4.2.3 The Meaning of Ivins' Sloppy Science

> Dr. Ivins was among the very few anthrax researchers nationwide with the knowledge and ability to create the highly purified spores used in the mailings.
>
> *Amerithrax Investigative Summary*[65]

Beyond what Ivins is capable of according to psychologists, Ivins' ability to create the very specific material that was in the letters are important criteria for considering him as a possible suspect and, thus, contribute to him being an appropriate object of suspicion. In this respect, the *Summary* is concerned with establishing two facts. First, Ivins had the particular training and skill to harvest the spores and prepare them to be appropriately virulent. Second, Ivins had access to the very specific biological material which investigators found in the envelopes. The latter of these is the most important part of the material evidence against Ivins as the Task Force came to believe that access the spore material was extremely limited. As explained above:

> In its early stages, despite the enormous amount of evidence gathered through traditional law enforcement techniques, limitations on scientific methods prevented law enforcement from determining who was responsible for the attacks. Eventually, traditional law enforcement techniques were combined with groundbreaking scientific analysis that was developed specifically for the case to trace the anthrax used in the attacks to a particular flask of material.[66]

The groundbreaking scientific analysis developed for the case was a type of genetic testing that identified "morphs," genetic variants of *Bacillus anthracis*. According to the *Summary*, this technique allows for two linked conclusions to be drawn. First, that the anthrax in the letters originated from a particular flask that Dr. Ivins had access to: RMR-1029 (see figure 2). Second, that Ivins provided false samples to the FBI and, in doing so, implicated himself as the mailer.

[65] Department of Justice, *Amerithrax*, 8.
[66] *Ibid.*, 1.

Figure 3 *Amerithrax Exhibit E, RMR-1029 flask*

Within the context of the investigation, Ivins' scientific expertise presents many difficulties and his ability to do sophisticated science creates stakes that cut both ways. On one hand, the Task Force argues that his expertise makes him capable of harvesting and preparing anthrax spores and, therefore, suspicious. On the other hand, his expertise actually made parts of the Amerithrax investigation possible – USAMRIID was the site of much of the initial forensic work in the case and Ivins was one of several USAMRIID scientists to handle and analyze the letters after the FBI recovered them. That scientists were resources for the investigation in these two senses was not lost on the researchers at Fort Detrick. Jeffery Adamovicz, the deputy chief of Bacteriology at Detrick, reflected to journalists that, "We were heroes in the morning and suspects in the afternoon."[67] If science was capable of pointing to a culprit, the culprit would be someone with scientific training. One of the more striking facts in the forensics of the case is that it seems to have been Ivins who explained to the Task Force that one could, in principle, use

[67] Quoted in Engleberg et al., "Did Bruce Ivins"

genetic analysis to identify mutant morphs in the anthrax letter material and, therefore, demonstrate its lineage and origin.[68] To be clear, the implication is that Ivins aided investigators in understanding a particular technique which ultimately they used to demonstrate his guilt. Ivins was uniquely irrational and therefore capable of the attacks, but also uniquely skilled and could understand how to catch himself. As with the encoded letters, the *Summary* makes it seem like Ivins invited his own capture by showing off his abilities.

Understood this way, Ivins seems to be either too good at performing his expertise or so overwhelmed with hubris and obsession that his various performances collapse in on themselves. For example, the *Summary* explains that Ivins was aware that the morphological analysis could, in principle, be used to trace the origin of the anthrax, but, in practice, it would be impossible because of certain assumptions Ivins had about RMR-1029. Thus, Ivins thought that he could propose a highly sophisticated method that he knew would not work in this specific case. The issue of morphs became important because the scientists at USAMRIID had identified the particular strain of anthrax used in the mailings, the so-called "Ames strain," but found that the strain alone would be insufficient for isolating a source.[69] For background, the Ames strain was isolated from an outbreak of anthrax that occurred in Texas in 1981 (it was named after the lab it was sent to in Iowa, not the site of the outbreak). The strain of anthrax is particularly virulent and, as a result, it is one of the most common variants of anthrax used by vaccine researchers in developing human vaccines. USAMRIID was one of the labs which maintained and distributed the strain to other researchers. According to the *Summary*, in 2001 only 15 US and 3 foreign

[68] A special agent with the FBI reported in 2002 a conversation with Ivins about morphological variants which can be found in *Amerithrax Vault* "Amerithrax Part 29 of 59," 3-6. The technique itself was published in David A. Rasko, et al., "Bacillus anthracis Comparative Genome Analysis in Support of the Amerithrax Investigation," *Proceedings of the National Academy of Sciences*, 108, no. 12 (2011): 5027-5032.

[69] Department of Justice, *Amerithrax*, 7.

laboratories had Ames.[70] In theory, since the material in the anthrax letters contained specific genetic mutations in a specific strain of anthrax, it might be possible to link the material in the letters back to its origin point. Thus, investigators requested samples from each of these – including from RMR-1029, USAMRIID's main store of anthrax. Preparation of those samples fell to Ivins, who handled RMR-1029 on a regular basis.

The FBI's plan was to request a specifically prepared sample (a "slant") of anthrax from every researcher who was known to possess a sample of anthrax that was in any way related to Ames. [71] In sum, this amounted to 1,070 samples of anthrax sent in duplicate to two different laboratories: one at USAMRIID and one at Northern Arizona University.[72] Like all the other samples, those sent by Ivins' were placed in an analysis queue and their duplicates were forwarded to the second lab. Then, they sat for a month while the laboratory prepared an analysis protocol. When the lab got up and running, a technician working on the FBIR rejected Ivins' submissions because Ivins had not followed the requested protocol. Specifically, Ivins and his technician submitted their samples in tubes filled with a growth medium that they had prepared from scratch while the protocol requested that samples be sent on a specific growth medium which was commercially available. The technician asked Ivins to resubmit, and Ivins did so. However, his second set of submissions was not labelled correctly. Still, the FBIR accepted the submissions because they appeared to be prepared under the proper protocol.[73] During this period of time, Ivins was not an object of suspicion and the rejected and then

[70] *Ibid.*, 19.

[71] "Slant" is the informal name given to a particular preparation of bacteria in which a growth medium (in the case of the anthrax samples, tryptic soy agar) is poured into a tube and cooled at an angle, after which it is inoculated with bacteria.

[72] *Ibid.*, 78-79, 24.

[73] *Ibid.*, 78.

unlabeled submissions raised no flags. The technician at the FBIR saw no reason to be suspicious.

In the years that followed (2004-2006), this series of events created problems and required explanation. Of the 1,070 samples, seven tested positive for four specific morphs of anthrax which were found in the letter material. The analysis suggested that these seven samples were very closely related to the mailed material. However, a puzzle emerged – all seven samples had direct, genealogical links back to RMR-1029 yet Ivins' sample from RMR-1029 had zero of the four morphs. How could it be that these seven samples had all the morphs yet RMR-1029 had none? By chance, the lab at Northern Arizona had never destroyed Ivins' original, rejected submission (the USAMRIID lab had). The original samples were tested for morphs and found to be positive with all four. How could it be that one sample from RMR-1029 had no morphs which the other had four?[74] This surprising fact required explanation. As the *Summary* puts it:

> Thus, the evidence suggested that Dr. Ivins obstructed the investigation either by providing a submission which was not in compliance with the subpoena, or worse, that he deliberately submitted a false sample.[75]

The *Summary* suggests what appear to be two possibilities: Ivins did not comply with the subpoena or he deliberately submitted a false sample. However, the 'suggestion' is that, in either case, Ivins obstructed the investigation, yet obstruction already implies deliberateness.[76] The FBI maintains that Ivins was told the right way to prepare a sample. Therefore, if he did it incorrectly he did so knowingly. Therefore, in any case he has obstructed. Though it was presented as two possibilities, it is really only one – Ivins has done something wrong and

[74] *Ibid.*, 78-.80.
[75] *Ibid.*, 79.
[76] Obstruction is specifically the crime in which a person knowingly prevents or delays an investigation. (U.S. Code 18 (2002), §1519).

hindered the investigation. The possibility that Ivins followed the protocol entirely and the error is due to some other means is leapt over. How this leap is carried out is described below.

As the case increasingly became reliant on the ability to link any suspect to a given line of anthrax, the FBIR analysis required vetting and the anomaly of RMR-1029's lack of morphs required explanation. As a result, the FBI seized RMR-1029 and carried out a series of thirty tests themselves. They re-ran the sampling procedure that Ivins was supposed to have run to see what, if any, variability might be possible. Both the results of these thirty tests and the conclusions that can be drawn for them are a matter of some debate. Here, I explain the *Summary*'s paranoid account of the tests. Below I put this account in contrast to the skeptical account provided by the National Academy of Science's. According to the *Summary*, "[o]ccasionally, only three of the four genetic mutations were detected, and at no time were less than three detected. It followed that if Ivins prepared his submission to the repository in accordance with the protocol, that submission could not miss all four of the morphological variants present in RMR-1029."[77] Here, then, is the gap. In thirty tests, little variability was shown. Therefore, Ivins' single attempt should be within that range of variability if he followed the procedure. In sum, Ivins, in some way, did not follow procedure and his results seem anomalous. How, then, to demonstrate that it was done deliberately?

In the *Summary*, this question of intent is answered like many of the other questions which connect Ivins to the case. First it is shown that, if Ivins is guilty, then he would have falsified the sample. Thus, falsifying the sample is evidence of his guilty conscience. Second, it is shown that Ivins cannot provide a 'reasonable explanation' for the error. In both cases, we encounter problems mentioned above. Ivins' mental instability makes it quite difficult to predict

[77] Department of Justice, *Amerithrax*, 79.

what he might do. If he really thought the process would be unable to point to him, why would he falsify his samples? Alternatively, if he was innocent but acting like a clinical paranoid, he might falsify the samples because he was worried he was being rail-roaded because he believed that "[t]he state smells its carnivorous death-blood sacrifice."[78] Finally, if he was as arrogant about his abilities as the *Summary* suggests, he may just have thought the rules did not apply to him and he could create his samples however he preferred. On the face of it, none of these hypotheses is more or less plausible than one another or the hypothesis that he was guilty and was obstructing justice. What the Task Force is interested in is not whether other possibilities exist, but whether Ivins himself can account for the problem reasonably. This seems fair enough, except that there is already no clear fact which makes any hypothesis objectively reasonable and there is already a fact of the matter about Ivins' mental state. He is by definition not a reasonable person and will almost certainly crumble psychologically under scrutiny. This is an immense burden to overcome. What the Task Force wants is not proof that Ivins did not falsify the samples (this is impossible). What they might accept would be reasons to allay their suspicion. That Ivins is incapable of doing this is not entirely the FBI's fault, though this is not the same thing as saying that he is obviously guilty as a result.

It is notable that if Ivins knowingly tampered with evidence and submitted a false sample, he did so in a way that was spectacularly foolish since the anomaly created by the bad evidence helped shift the blame to him. Thus, an account of why Ivins would do this requires an account in which Ivins' scientific expertise is faulty. This fault lies, according to investigators, in the fact that Ivins thought RMR-1029 to be free of morphological variants when he made the first

[78] *Ibid.*, 69.

(rejected) repository sample but learned otherwise prior to sending the second.[79] So, when Ivins originally created the anthrax material that he mailed, he assumed that he had been mailing a sample either free of morphs or with highly unique morphs which could not be reproduced. In short, he thought he was creating an untraceable weapon. So, when he (incorrectly) prepared the first samples he was doing so with the confidence that the sample would not link him to the crime. It turns out, however, that this way of thinking was very wrong because RMR-1029 contained morphs. According to the *Summary*, "[i]f Dr. Ivins learned this information between his two submissions to the FBIR, it would explain why the second submission was misleading."[80] Ivins sat in a meeting where the existence of morphs in the letter material was discussed prior to his second submission, thus it seems likely that Ivins did learn about the increased importance of the moprhs. The story goes that Ivins, knowing that a correctly prepared sample of RMR-1029 would implicate him, carried out a different sampling procedure (a procedure called "single-colony pick), that would not contain matching morphs. Thus, his sample, when analyzed, would not match the letter material. It is hard to call this narrative implausible, paranoid though it is.

When the FBI questioned Ivins about the inconsistency in the sample, Ivins provides several explanations for the problem, some of which seem to be contradictory. Chief amongst the contradictions is the claim that Ivins first takes responsibility for the sample, but later distances himself from it in a variety of ways.[81] First, he claimed his technician must have prepared the sample (the technician denies this and appears to have been doing other work at the time). Second, Ivins claimed that he did not know how to prepare the samples. The *Summary*

[79] *Ibid.*, 81.
[80] *Ibid.*, 82.
[81] *Ibid.*, 82.

calls these poor explanations because there is every reason to believe that Ivins did know how to do the protocol. Much hinges on what makes an explanation poor, of course. We already know that Ivins failed to follow the protocol once and, even in the version of events provided by the *Summary*, he did so after being told how. Further, the *Summary* has already contended that Ivins frequently tells strange stories about the past and often disassociates himself from his own activities. Within the paranoid narrative, Ivins is unpredictable, anxious, and capable of anything except forgetting details, being defensive, or simply falling apart under the pressure of the investigation which he had become part of. Ivins is smart enough to help investigators catch him and foolish enough to falsify evidence incorrectly. He is an expert in theory, but a complete madman in practice and the FBI best him at both scientific forensics and cryptography. They have found out all his obsessions and laid bare his pitiful attempts at covering his path. The paranoid narrative is not self-contradictory, though it is tragic.

So far I have demonstrated how Ivins' psychological difficulties serve as the lens through which all his activities are understood insofar as they act as facts which self-evidently show Ivins to be an appropriate object of suspicion However, Ivins' behavior is insufficient to do this; the Task Force also needs to show that Ivins could had access and opportunity. As shown above, the *Summary* explains that cutting-edge forensic testing unequivocally linked the letters to RMR-1029 and showed how Ivins' samples to the FBIR require explanation. Thus, the evidence uncovered by scientific investigators plays a key role in the argument. Even though the paranoid attitude is capable of making huge inferential leaps, it still relies on an underlying possibility in the material conditions of the case. Similarly, Dugway Proving Ground and Fort Detrick were plausibly understood to be a place filled with chemical weapons that could have killed the sheep and cows in those stories. The complexity of the Amerithrax mailings requires more than just a

suspicious character, it requires a character like Ivins potentially is – a suspicious character near suspicious materials.

In what follows, I show how the National Academy of Sciences' (NAS) review of the Amerithrax forensics attempts to carry out a detailed skeptical critique of the material links in the case which, according to the *Summary*, seem necessary to implicate Ivins as a suspect. When the science becomes muddy and the uncertainty within the FBIR analyses are highlighted, one might expect the FBI's case narrative to adapt or fall apart. In their response to the NAS review, the FBI re-shapes the case narrative and, in doing so, offers a cautionary reminder about the limits of scientific forensics and the lack of utility found in the skeptical attitude as articulated by scientists. Just as Török et al. explained with respect to the Rajneesh food poisoning, skeptical scientists are incapable of drawing the right kind of inferences to demonstrate guilt or innocence. Science cannot speak for itself, unless the FBI says so. As in Chapter 3, a clear line is drawn between the attitudes and methods of scientific investigators and criminal investigators, but, with Ivins, that line has additional implications. By virtue of their expertise, the scientists are not only limited with respect to their conclusions, but also suspect in acts of a peculiar kind. Thus, we find in the dialog between the NAS and the FBI another triumph of the paranoid attitude over the skeptical that gets to the heart of the problem of defining bioterror events, naming bioweapons, and ascribing terrorist motives. Skeptical scientists find themselves at a double disadvantage – not only can they be made to seem incapable of contributing to a vital investigation (as they were in the Rajneeshee case), but they can also be made into an important category for profiling. When you are the suspect, your skepticism may be evidence of your guilty conscience.

4.3 THE (SELF)-SUBORDINATION OF THE SKEPTIC

In 2008, after Ivins' death but before the publication of the Amerithrax *Summary*, the FBI requested that the National Research Council (NRC), the part of the NAS which carries out and publishes NAS sponsored reviews, perform a review of the scientific evidence used in the Amerithrax case.[82] Whereas the *Summary* is a document characterized by strong language and positive conclusions, the *NAS Review* draws mostly negative conclusions and frequently refers to the tension inherent in its own undertaking. In short, the two documents exhibit an exemplary contrast between the paranoid and the skeptical responses to the difficult forensic landscape within the Amerithrax case. However, while the *NAS Review* performs the skeptical attitude at every turn, it tells a less-learning story similar to Török et al.'s in theme but quite different in content. On the second page of the Preface[83], the *NAS Review* explains that:

> …It is also important to recognize that when science meets law enforcement there are several tensions that need to be balanced: openness and secrecy, collaboration and independence, and deliberateness and expediency.
>
> We also learned from this investigation that there is an immediate and ongoing need from the outset of an investigation to obtain expert advice and have available a group of advisors who can provide conceptual insight and relevant expertise to scientific plans, approaches, and scenarios. An unavoidable observation from the 2001 *B. anthracis* mailings is that the best subject matter experts in a given area also might be viewed as suspects. Working with potential suspects during a sensitive investigation is a challenge that the law enforcement community must continually address through its vetting processes.[84]

Here, the *NAS Review* calls specific attention to the difficulty encountered by scientists working within such an investigation in a way which was absent from Török et al.'s account of the epidemiology surrounding the Rajneesh poisoning (there the criminal investigators found the

[82] National Research Council, *Review*, xi, 1.

[83] The preface of the report was authored by Alice P. Gast (President, Lehigh University) and David A. Relman (Professor, Stanford University & Chief of Infectious Diseases for the Palo Alto VA), the Chair and Vice-Chair of the review panel.

[84] National Research Council, *Review*, xii.

germ lab and then linked it to the crime). Simultaneously, the presence of scientific investigators is explained as a necessary component of the investigation. They are a necessary evil. Further, the *NAS Review* sets science and law enforcement up as two communities with different values and different goals. In this account, scientists, who normally operate openly and in collaboration with one another through some deliberately thought-out process, will naturally clash with Criminal investigators, who must operate in secret, independent of consultation from others toward an expedient case closure. This clash may be part myth, but it seems to capture well the frustrations that occur when criminal investigators who both ask for help from science but want to turn the tools of science toward their own ends. The *NAS Review,* as a scientific narrative, tries to wrestle control over the scientific evidence of the case back from the FBI by repeatedly performing the skeptical act of pointing to uncertainty. However, the rejoinders by the FBI after the *Review* is published show how ineffectual that rhetorical move is.

4.3.1 What the Skeptic Says Science Can't Do

> Our major finding is that:
>
> **It is not possible to reach a definitive conclusion about the origins of the *B. anthracis* in the mailings based on the available scientific evidence alone.**[85]

In the first section of the findings, the *NAS Review* explains in clear terms how the FBI "appropriately" began to put together the FBIR (the repository of anthrax morphs), but, in the end, did so in a way which included instructions which were "not precise" and led to a system

[85] *Ibid.*, 144, emphasis in original

which was, overall, "not optimal."[86] Problems in the design and assembly of the FBIR, "limit the strength and conclusions that can be drawn" the comparative analyses done on lab samples and the material from the anthrax letters. Expediency, here, is the enemy of deliberateness.

In what ways was the FBIR assembled without precision? In short, the subpoena protocols were not well explained, the provenance of the requested samples was unclear, and the collection process required that the individuals holding the samples do the submissions.[87] The first and last of these are of particular import not only as claims about the science but also as non-scientific factors in the investigation. Recall that the FBI said that Ivins obstructed the investigation by preparing his samples either incorrectly or falsely, yet the *NAS Review* claims that such a mistake is traceable to the subpoena which requested the samples in the first place. Further, since labs so regularly shared and re-shared strains, building a clear tree of where a given sample came from was unclear. In fact, Paul Keim, the researcher in charge of the second FBIR collection at Northern Arizona, reported that 5% of the samples sent to the FBIR turned out not even to be Ames anthrax.[88] That is, the FBI sent a lab a subpoena for a slant of a sample that was believed to be anthrax, but what was sent in response was some other strain of anthrax. Because of the three, above stated problems it is difficult to know how this happened. Was it because of bad instructions? Bad record keeping? Intentional deception on the part of the sender? Keim blames it on the bad records of provenance, but, as we saw above with Ivins, it is not clear what would warrant such a claim in the absence of an extensive follow-up analysis. To Keim and the *NAS Review*, these kinds of phenomena were not causes for suspicion, but easily

[86] This term is the standard unit of approval for the "Committee Findings" in the *NAS Review*, whereas words like "not precise" or "not optimal" are used to describe problematic scientific behaviors carried out by criminal investigators.

[87] National Research Council, *Review*, 144-145.

[88] "Paul Keim: 'We Were Surprised It Was the Ames Strain'," *Frontline*. October 11, 2011, accessed November 20, 2014, http://www.pbs.org.

explainable errors that emerged from a system that was not appropriately precise. An absence, in these terms, needs no explanation and especially no explanation which requires the language of criminal psychology. The criminal investigator works expediently by necessity, but expedience can be the enemy of deliberate action.

Because of and in addition to the perceived problems with the assembly of the FBIR, the *NAS Review* repeatedly calls into question the strength and definitiveness of the conclusions drawn in the *Summary*. In many cases, the *NAS Review* calls into question specific claims and provides a direct textual critique of the *Summary*. One of the more important claims is as follows:

> The scientific data alone do not support the strength of the government's repeated assertions that "RMR-1029 was conclusively identified as the parent material to the anthrax powder used in the mailings" (USDOJ, 2010, p. 20), nor statements about the role of the scientific data in arriving at their conclusions, as in "the scientific analysis coordinated by the FBI Laboratory determined that RMR-1029, a spore-batch created and maintained at USAMRIID by Dr. Ivins, was the parent material for the anthrax used in the mailings" (USDOJ, 2010, p. 8).[89]

Importantly, the claim here is not that the *Summary* has made false claims but merely overly strong ones. Indeed, as that section asserts, the analyses are "consistent with" the hypothesis that the spores came from RMR-1029, but cannot be used to demonstrate "definitely" that such was the case.[90] As in the prior case, the *NAS Review* explains that since all the FBIR analyses rely on untested assumptions concerning the ways in which the various subpoenaed labs created their samples, there is no way to claim with certainty that the sample from RMR-1029 was the parent material. As even the *Summary* explained, when the FBI seized RMR-1029 and sampled it themselves there was variation in the number of morphs found.[91] Indeed, the *NAS Review*

[89] National Research Council, *Review*, 145-146.
[90] *Ibid.*
[91] Department of Justice, *Amerithrax*, 79.

explains in much detail how false negatives present in the resampling of RMR-1029 make any statement of certainty impossible.[92] As a result, it is:

> …impossible for the committee to generate any meaningful estimate of the probability of a coincidental match between the *B.anthracis* genotypes discovered in the attack letters and those later found by screening samples from the RMR-1029 flask.

Again, this is a statement about what the science cannot show, not about what is and is not true about the attacks and the alleged attacker. Without speaking explicitly to the matter of Ivins' guilt, the *NAS Review* continues to strip away the warrants for thinking that Ivins' was the guilty party by opening up the various scientific procedures and demonstrating their relative uncertainty. Again and again, the *NAS Review* shows how the ambiguous and poorly collected evidence is insufficient for certain conclusions about anyone, much less the unnamed suspect, Ivins.

Just as the *Summary* repeatedly provides possible explanations for Ivins, the *NAS Review* provides a laundry list of problems and possible alternatives to explain the forensic data: the mutations might have matched because of parallel evolution, other possible sources were not ruled out, point mutations were not considered, the FBIR relied on matching to material from only one letter, etc.[93] It might even be that reassessment of the evidence with newer techniques might yield a different result.[94] Thus, the *NAS Review* engages in its own development of possibilities, but it does so in a different pattern and toward different ends than the field of possibility created by the *Summary*. Whereas in the *Summary*, and the accounts of bioweapon accidents in the 1970's, claims about possibilities are used to demonstrate hypotheses that point repeatedly toward the same object of suspicion, the *NAS Review* inverts this process and

[92] National Research Council, *Review*, 140-144.
[93] *Ibid.*, 144-151.
[94] *Ibid.*, 150.

generates a network of tangentially related hypotheses to show that no single hypothesis is uniquely plausible. When it comes to the 'uncertain proof' against Ivins, the *Summary* sees proof whereas the *NAS Review* sees uncertainty. What the *NAS Review* explicitly ignores, however, is the presence in the world of objects of suspicion.

4.3.2 What the Paranoid Says Science Can't Do

In February 2011, one year after the Department of Justice (DOJ) formally announced the case closed, the DOJ made another press release, this time in response to the newly published review by the National Academy of Sciences. The release lauds the report and thanks the National Academy of Sciences for their hard work, but the FBI also slowly builds up its own counter-narrative of uncertainty.

> The committee's Report reiterates what is and is not possible to establish through science alone in a criminal investigation of this magnitude. … The committee also concluded that it is not possible to reach a definitive conclusion about the origins of the *B. anthracis* in the mailings based on the available scientific evidence alone. The FBI has long maintained that while science played a significant role, it was the totality of the investigative process that determined the outcome of the anthrax case. Although there have been great strides in forensic science over the years, rarely does science alone solve an investigation. The scientific findings in this case provided investigators with valuable investigative leads that led to the identification of the late Dr. Bruce Ivins as the perpetrator of the anthrax attacks.[95]

Here, the DOJ turns the tables on the *NAS Review*'s argument – the Task Force knew all along that science could not solve the case through some series of certain forensic tests. The scientific forensics of the case, seen this way, were not evidence of guilt but simply signs which pointed investigators toward an appropriate object of suspicion (though this is not the argument made by

[95] Department of Justice, Office of Public Affairs, "FBI and Justice Department Response to *NAS Review* of Scientific Approaches Used During the Investigation of the 2001 Anthrax Letters," Press Release, February 15, 2011, accessed November 20, 2014, http://www.fbi.gov/news/pressrel/press-releases/fbi-and-justice-department-response-to-nas-review-of-scientific-approaches-used-during-the-investigation-of-the-2001-anthrax-letters.

the DOJ a year earlier in the *Summary*). In the words of the *Summary*, "RMR-1029 is the source of the murder weapon," [96] and Ivins' peculiarities help provide "both a context for his motives to commit the crime and an explanation for how he could commit such a horrific and tragic offense."[97] Within the *Summary*, the psychological evidence, the evidence of Ivins' guilty conscience, the letter codes, his suspicious behavior, all function as explanations which make Ivins' an appropriate object of suspicion. His psychology accounts for his actions as told by the links made by the scientific forensics. Here, the relationship seems inverted. The other evidence is the *real* evidence and the forensics merely help make the story plausible.

There are two non-contradictory interpretations of this re-orientation of evidence and suspicion, the first political and the second rhetorical. One might think that this latter account was always the "actual" account, and that the *Summary* has been strongly worded in the same way that a prosecutor's case is unequivocal in a court of law. Further, the Task Force was under some pressure to close the case given the weight of the initial public health crisis caused by the possibility that the US Mail system had become contaminated by the letters, the fact that it seemed anyone could be targeted, and the more general threat caused by the fact that the mailer, a terrorist, remained at large. In total, the case remained publically open for almost a decade and remained in the news cycle in various forms for the entire period: a public health crisis, a manhunt, a manhunt gone wrong (when Hatfill sued the DOJ and New York Times), and then finally a scientist gone bad. In one study of the anthrax-related journalism published in the 61 days after the mailings became public, the researchers *limited* their sample to 3,523 print sources,

[96] Department of Justice, *Amerithrax*, 28.
[97] *Ibid.*, 41-42.

ignoring entirely online-only or television-only reports.[98] Between September, 2001 (when the mailings became public) and February, 2010 (when the DOJ announced 'case closed'), the *Washington Post* published 1,391 articles with references to the anthrax mailings. At the lowest point in the publication record, 2007, the rate of article appearance falls to an average of three articles on the subject every two months. When expanded to consider other references to anthrax and bioterrorism in general, the article pool doubles in size.[99] An explanation was needed for the mailings and, in 2008, an explanation was needed for the corpse of Bruce Ivins.

Political pressures aside, I have also shown in previous chapters how history is reimagined in a way that tends to wash away attitudes. Once the view of Ivins as an object of suspicion emerges, it seems almost impossible to combat. Over time, it just becomes true that Ivins was the best suspect all along. He had always been spending suspicious time in the lab; he had always falsified the first FBIR samples; he had always been playing his strange, arrogant game to make himself both the terrorist and the hero. That it took some time for the FBI to discover this follows logically from the kind of clever but ultimately self-destructive person that Ivins is. In contrast to Hofstadter's experience with the letters, the more we look at Ivins the more suspicious he appears. If we demand, like McCarthy did, definitive proof that Ivins is innocent, nothing will convince us to think otherwise besides the very smoking gun whose absence required our interpretations in the first place. Yesterday's paranoid becomes today's prophet.

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[98] Felicia Mebane, Sarah Temin, Claudia F. Parvanta, "Communicating Anthrax in 2001: A Comparison of CDC Information and Print Media Accounts," *Journal of Health Communication* 8, no. Supplement 1 (2003), 50-82.

[99] A query within the date range specified for "anthrax AND (mail or letters)" in the first case and a search for "anthrax OR bioterror Or amerithrax" in the second case, both from *Proquest's* current "National Newspaper Database." The *NAS Review* and investigative journalism done after the DOJ makes the case files public (notably, the "Anthrax Files" series done by a collaboration between Frontline, McClatchy, and Propublica) keeps the story in the public even after the case is closed.

In a final, ironic post-script, facing a civil suit of negligence by the family of Robert Stevens, one of the anthrax victims, civil attorneys for the DOJ submitted a curious brief. The plaintiffs of *Stevens v. United States* contended that the government had recklessly experimented with anthrax, leading directly to the death of Robert Stevens and others. To refute this claim, DOJ attorneys filed a declaration using evidence from within the *NAS Review*[100] and corroborated by FBI forensic scientists[101] which showed that the anthrax letter material could not have come directly from RMR-102 based on a combination of technical limitations at USAMRIID and missing chemical connections between RMR-1029 and the mailed spores.[102] Realizing the difficulties caused by this possible contradiction of the *Summary*, DOJ attorneys filed errata to the brief to clear up the ambiguity and, shortly after, the government settled the suit for $2.5 with the stipulation that the settlement "shall not constitute nor be construed as an admission of liability or fault on the part of the United States, its officers, agents, servants, contractors, employees or representatives, and it is specifically denied that they are liable."[103] In this last strange turn, the DOJ showed how easily the skeptical attitude could do work to the Amerithrax case, though it ultimately made the same choice that the Army did with the Skull Valley Sheep (i.e. pay and deny culpability). Yet, one thing is undeniable: even though Ivins himself was unpredictable, his access and skills were facilitated by the government as part of the

[100] National Research Council, *Review*, 86-89.

[101] C. Swider, et al., "Trace Detection of Meglumine and Diatrizoate from Bacillus Spore Samples Using Liquid Chromatography/Mass Spectrometry," *Journal of Forensic Sciences*, 57 (2012): 923–931.

[102] A summary of the science and the case are provided in Amesh Adalja, "Additional Forensic Investigation of 2001 Anthrax Attacks," *Clinicians' Biosecurity News*, May 25, 2012, accessed November 20, 2014 http://www.upmc-cbn.org/report_archive/2012/cbnreport_05252012.html. The prolonged drama of the case are further elaborated in Jerry Markon, "Justice Dept. Takes on Self in Probe of 2001 Anthrax Attacks," *Washington Post*, January 12, 2012, accessed November 20, 2014, http://www.washingtonpost.com/.

[103] Quoted in Mike Wiser, Greg Gordon, and Stephen Engleberg, "Government Settles Anthrax Suit for $2.5 million," *Frontline*, November 29, 2011, accessed November 20, 2014, http://www.pbs.org/wgbh/pages/frontline/criminal-justice/anthrax-files/government-settles-anthrax-suit-for-2-5-million/.

same biosecurity apparatus invented by Nixon and his rhetoric of defense. The presence of these unpredictable kinds of people requires research into defense. In both that broad problem and the specific problem of the anthrax letters, we need biosecurity because there exist people with bad motives not the regulation of materials. Biological weapons don't kill people; people do.

4.4 CONCLUSION: ACCOUNTING FOR THE UNACCOUNTABLE

> Finally, Dr. Ivins failed, at nearly every turn, to provide reasonable or consistent explanations for his suspicious behavior. As set forth in great detail throughout this section, Dr. Ivins did many things, and said many things, that demonstrated his guilt. However, throughout the course of the Task Force's interviews with him, when investigators confronted him with a piece of evidence, and asked him to explain why he did what he did or said what he said, he was unable to provide an answer that made any sense.[104]

In this chapter and the preceding, I have pursued a series of narratives in which the guilt of specific individuals is sought at the intersection of means and motives. While the legal definitions for bioterror would seem to suggest that the case-emphasis should rely on the materials (the bio), the cases against Ma Anand Sheela, Steve Kurtz, and Bruce Ivins demonstrate the ambiguity of tying the bioterrorist to his or her act. Sheela refused to account for herself, taking a plea of guilt without admitting wrongdoing. Kurtz gruelingly protested what his possession of suspicious materials might mean about both him and his wife. In the wake of Kurtz's difficult victory Ivins briefly attempted the same. Whether or not the material case against Ivins was any stronger (in legal terms) than was the case against Kurtz is irrelevant. Ivins committed suicide before being indicted, and so the *Summary* is not equivalent to a legal

[104] Department of Justice, *Amerithrax*, 86.

brief and there exists no specific forum that could decide the official interpretation. The lack of a confession or eye-witness report left investigators amidst a landscape of uncertain evidence which required an attitudinal response. The paranoid and skeptical narratives do come into conflict, but the skeptics failure to rebut charges of impracticality and their easy acceptance of skepticism's failings show the skeptic to be the unquestionable loser in that rhetorical contest. The skeptic is shown to be an inadequate but necessary appendage to the biosecurity apparatus.

The public prosecution *in absentia* of Bruce Ivins also shows how necessary people like Ivins are to biosecurity. In the 1970's Nixon renounced Biological Weapons because no rational actor would pursue a program in them. However, a problem emerged – what should we do to defend ourselves against the irrational actor? The answer was Defensive Biological Research – research into biological weapons for the *purpose of* defense. These weapons would not be weapons *per se* because weapons require either use or intent thereof, thus the US program remains legal in terms of the relevant international law. From this very program, a program devoted to defense, officially directed toward vaccine research, populated by civilians, and involved with possible bioweapons emerges an irrational actor. The feature which made Ivins dangerous – his irrationality – makes him unpredictable in two senses. Not only is the government admittedly incapable of knowing what Ivins is capable of, but the government also seems to claim that they could not even imagine the possibility of such a person as him. Paradoxically, our inability to imagine and see such a person as him requires and justifies the very work that Ivins does. Indeed, the motives attributed to Ivins include this possibility. The FBI claims that Ivins mailed the anthrax so that his particular skills would remain necessary to the defense establishment.

What I have attempted to show here is not that the case against Ivins is 'weak' or that Ivins is surely innocent. On the contrary, because of Ivins' psychological difficulties and the crime that Ivins is accused of, the case is all that it needs to be. The definitions of the crime and the ways in which they are applied to Ivins play out so effectively in his behavior that no more solid account is necessary to motivate a highly persuasive paranoid narrative that fits within the history of other vindicated paranoid biothreat stories. Just as Weaver explained in 1984 and Török et al. explained in 1997, the DOJ reminds us that science alone is not capable of finding criminals like Ivins out. Even worse, since the scientists are suspects already their skepticism may be masking a guilty conscience. They can point the way, but criminal investigators will be the only ones capable of providing an actual account.

According to the biosecurity community, we should take the cases that I have explored in Chapters 3 and 4 as evidence of a very real threat. Events are defined, in part, so that we can understand the appropriate response, and this relationship between events and responses motivate my investigation here. How the government responded to the anthrax mailings – through legislation – invites criticism even without a detailed critique of the Ivins' case narrative. With such a critique, as detailed above, serious questions emerge about how the powerful institutions within the government continue to construct and respond to the bioterror threat, especially as both that construction and response forecloses discussion on the matter and relies on a cycle of self-generated uncertainty. Reviews like the one carried out by the NAS should function as actual checks on criminal processes, yet the dialog between the NAS and the FBI demonstrate a disappointingly one-sided struggle. In part, this seems to be an unforeseen consequence of the alliance between scientists and security researchers within the biosecurity apparatus. Biosecurity, as motivated by the rhetoric of defense, is not a skeptical enterprise even though it

requires skeptical, scientific methods. In the next and final chapter I consider briefly the role of psychological evidence in the case against Ivins as another example of the strange products of alliances between scientific experts and criminal investigators. Specifically, I show the peculiar role of the Report of the Expert Behavioral Analysis Panel in relation to the Summary and the NAS Review. In that Report, the problem of bioterror amounts to the inability of those around Ivins to see him as a biothreat. In this way, the report is much like Török et al.'s reflections about their own failure to imagine certain criminal possibilities. However, in this case the scientific experts act as an approving "independent" review of their own work. As masters of suspicion, these psychologists perform a novel mix of the paranoid and skeptical attitudes which meshes almost perfectly the sensibilities of criminal investigators, though it raises many ethical questions about the proper ends and practices of behavioral scientists and clinicians.

5.0 RATIONALITY AND THE BIOTERRORIST IMAGINATION

> The FBI appreciates the efforts, time, and expertise of the panel and its highly respected chair and members. The panel's analysis, findings, and recommendations provide important insight that will further contribute to the public's understanding of the investigation into the deadly anthrax mailings. The report also provides valuable perspectives that may be useful in preventing future attacks—in addition to what the government has already learned in the course of the investigation.
>
> -FBI Press Release 2011[1]

In the last three chapters I have attempted to explain how the concept "bioterror" has been constructed by considering three important anecdotes in the history of man-made biothreats: Nixon's renunciation of Biological Weapons Research, the 1984 Rajneeshee food poisoning in The Dalles, and the pursuit and death of alleged bioterrorist Bruce Ivins. Within the narratives of each anecdote I have pointed to a contest between two different ways of talking about the world – the paranoid and skeptical attitude – which have become severely out of balance within biothreat talk in a way not justified by the historical, practical upshots of the two attitudes. In what follows I conclude this investigation in three final sections. First I offer a final and particularly troubling post-script to the case of Bruce Ivins. I have argued in previous chapters that skeptical research scientists are disempowered within the paranoid biosecurity framework. While some scientists give their power up (Török et al.) and others contest (the NAS Review), a key driver of the power of biosecurity are scientists who apply their scientific expertise toward paranoid ends. In order to highlight some of the ethical problems this creates I provide a brief, but close, reading of the *Report of the Expert*

[1] FBI National Press Office, "FBI Response to Independent Expert Behavioral Analysis Panel Report on Anthrax Mailings," Press Release, March 23, 2011.

Behavioral Analysis Panel, a summary of the psychological evidence against Ivins. This reading shows the troubling consequences of applying the therapeutic science of psychology to the search for terrorists. After offering this final, representative anecdote for how paranoia shapes scientific expertise, I use the case as a foundation for a summary and conceptual conclusion to the dissertation. There I return to the major claims of the preceding chapters about paranoia, skepticism, and the rhetoric of defense. Since this project has been primarily a descriptive one, I follow this conceptual summary with a look toward other, future projects that might do helpful normative work to correct for the kinds of problems that I claim are at work in current biothreat rhetoric.

5.1 EXPERTISE AT THE EDGE OF SCIENCE AND ETHICS

In their review of the forensic methods and evidence of the Amerithrax case, the committee from the National Academy of Sciences (NAS) was careful to make clear that they were neither assessing Ivins' guilt nor were they assessing the various claims made by the Taskforce about Ivins' motives. In 2009, a separate report was requested by a federal judge to "the mental health issues of Dr. Bruce Ivins and what lessons can be learned from that analysis that may be useful in preventing future bioterrorism attacks."[2] While the Report of the Expert Behavioral Analysis Panel (EBAP) is sometimes called a "review," it is not a review in the same sense used by the NAS. Instead of reviewing the robustness and validity

[2] Royce Lambreth, quoted in Expert Behavioral Analysis Panel. *Report of the Expert Behavioral Analysis Panel.* Vienna, VA: Research Strategies Network, (2001): 1, accessed November 20, 2014, http://researchstrategiesnetwork.org/expert-behavioral-analysis-panel-amerithrax-case/. Hereafter mentioned in the text as *EBAP*.

of the psychological methods applied to Ivins and the resulting profile developed by FBI psychologists, the document is primarily an extended summary of Ivins' psychological profile. How these differ is subtle, but important. What the EBAP proposes to do is to explain, "the connections, if any, between his mental state and the commission of the crimes."[3] In doing so, they undertook the review "with no predispositions regarding Dr. Ivins' guilt or innocence and in fact without even a focus on that issue," even though their conclusions do "support" the determination that Ivins was responsible.[4] Many puzzles emerge.

How they propose to analyze Ivins' behavior within the context of the attacks without presuming his innocence or guilt is not at all clear. His case narrative, which they examine at length, is almost a direct mirror of the account provided in the Amerithrax Summary, save that the EBAP goes into far more detail about Ivins' youth and the possible psychological damage that he experienced at the hands of his abusive mother. At times, the analysis does seem to be agnostic about the matter of guilt. When the case narrative focuses on Ivins' obsession with the KKG sorority or his various workplace, social clashes, it would seem that the EBAP is indeed 'in support' of guilt without actually presuming guilt.[5] However, in speaking about the attacks themselves, the EBAP sometimes refers to the perpetrator of the crimes as "the mailer," in other cases offers tentative reasons why Ivins *might* have committed the crimes, and in many cases simply explicitly talks about the attacks as if Ivins did in fact commit them. For example:

> "In carrying out the anthrax attacks of 2001, Dr. Ivins acted out of an extraordinary confluence of motives."

[3] *Ibid.*
[4] *Ibid.,* 1.
[5] *Ibid.,* 31-106.

"…Dr. Ivins targeted very specifically…"

"By launching the attacks, Dr. Ivins showed that anthrax was a real threat…"

"Understanding Ivins' motives may also explain why he sent two sets of letters."[6]

It is hard to see how these descriptions can be considered part of a guilt-neutral account of Ivins' state of mind. Further, the style employed by the EBAP tends to obscure to important uncertainties – Ivins never explained his motives and was never convicted of the crime. The EBAP performs an encore of what the FBI has already done, minus demand that Ivins provide an alternative explanation. The paranoid accusations made in the face of uncertain evidence are now converted into seemingly modest statements of fact that blend seamlessly into the EBAP's narrative. The arguments made by the EBAP support the FBI's conclusions insofar as they restate the FBI's argument that Ivins' tendencies substantiate his appropriateness as an object of suspicion. That is, the EBAP minimizes any definitive distance between Ivins doing obsessive things and Ivins being an obsessive person, the kind of person from whom we should expect primarily obsessive things. It would seem to be a fact of the matter that Ivins had mental difficulties and strange obsessions, but there is an additional inferential step to say that these behaviors are what typify Ivins and are what we should expect from him. This latter description is what the EBAP understands itself as doing. They show through case narrative the two Ivins: the Ivins constructed through Ivins' conflicting accounts of his activities and Ivins "true self, hidden from public view."[7] Thus, even though the EBAP claims not to presume guilt, it is engaged in a reductive project that focuses specifically on

[6] *Ibid.*, 107-110.
[7] *Ibid.*, 3.

Ivins' abnormalities. Given such a focus, nothing else could emerge save an account of an abnormal subject.

Even if we assume that Ivins can be reduced as such, it is an even further step to say that if we know that these behaviors typify Ivins, then we have sufficient grounds for showing his guilt. Since the EBAP assumes the forensic case is sound they need no such argument. The NAS calls into question the forensic account, but the FBI claims that this does no damage to the criminal case because of the motivational account, the part of the case that the NAS cannot be experts about. The EBAP concludes, by assuming the forensic account, that Ivins' mental illness is consistent with the attack. However, in showing this, they actually describe Ivins as having done the attack. In this accounting, all that matters is the case laid out by the FBI. The FBI appreciates the hard work of all the experts, but never needed the conclusions of the scientific and behavioral experts, only the raw materials of their various methods.

However, what is remarkable, maybe even admirable, about the EBAP is its conclusions about the institutional failures which, given the official account, made Ivins' attacks possible. Essentially, the EBAP concludes that Ivins' mental illness, specifically the aspects of his illness known prior to the attacks by medical personnel, should have disqualified him from the work that gave him access to the infamous RMR-1029 flask. While the EBAP suggests that Ivins seems to have engaged in a constant campaign of deception, it also describes a history of institutional complacency toward Ivins' obviously strange behavior. Privacy law did not preclude Ivins' employers form learning of his illness, though the EBAP speculates that health care workers may have assumed otherwise.[8] Thus, the EBAP

[8] *Ibid.,* 15-17.

concludes that "risk assessment" of Ivins failed.[9] Ivins was a threat all along and his superiors should have realized this. Ivins' employers were not paranoid enough. If Ivins is guilty, then the EBAP is surely right on this point. However, this may beg the question. It may be that *no one* should have access to RMR-1029. The EBAP makes no such suggestion just as Török et al. seem to think that restricting access to dangerous pathogens is impractical.

The EBAP's report is importantly different from the NAS Review in content and attitude. In content, it does not review the certainty of the methods used in the case, merely the plausibility of a well told paranoid story about Ivins. It is a summary rather than an evaluation. In attitude, the EBAP's report both rearticulates and historicizes the paranoid attitude demonstrated throughout the *Summary* that generates possibilities and treats them as self-evidently born-out statements of fact. This may be a consequence of the EBAP simultaneously adopting the behavioral narrative provided by the *Summary* while attempting to remain neutral with respect to the single fact of Ivins' guilt. As I demonstrated in Chapter 4, the account of Ivins' guilt and the story about Ivins' mental illness are not so easily separable within the paranoid narrative when we assume that one supports the other. However, when understood as paranoid narratives which self-consciously speak from ambiguous evidence the stories fit into a well-worn pattern of locating objects of suspicion in isolation and demanding from those objects proof that they are not as dangerous as they seem. This is a heavy burden; it requires proof of a negative.

I have avoided speculating about misconduct and negligence when discussing the Department of Justice in an attempt to remain both comic and skeptical, but the case of the EBAP admits of a less charitable view that deserves consideration. Dr. Gregory Saathoff , the

[9] *Ibid.,* 16.

Chair of the EBAP, has consulted with the FBI since 1996 and according to David Willman's *Mirage Man* Saathoff consulted with the FBI while Ivins was still alive. Specifically, Willman claims that Saathoff was on hand to advise the FBI as they prepared to interview Ivins in 2008.[10] If Willman's research is sound, then Saathoff is not truly an independent reviewer. Even worse, Saathoff may have provided an 'independent' review of a psychological model that he helped develop. Since any mention of Saathoff would have been redacted in the FBI's files as well as the findings of the EBAP, it is difficult to evaluate these claims. Paranoid conclusions aside, this potential problem is significant as yet another barrier to a transparent account of the case. In a different less paranoid vein, Dr. Annette Hanson, a forensic psychiatrist and author, has argued that the EBAP's report (as well as its sale by Saathoff's non-profit Research Strategies Network) constitutes at least a conflict of interest and at most a violation of the American Academy of Psychiatry and the Law's ethical guidelines for psychiatrists who consult with law enforcement.[11] Saathoff studied Ivins prior to his death and, according to the EBAP's report, his violent tendencies were known to investigators. Thus, Saathoff might have observed Ivins' mental collapse and the series of events that led to his suicide. Perhaps all of these accusations are unfounded or untrue, but this is another consequence of the closed, redacted loop that is the Amerithrax investigation. Note too how secrecy admits so easily of paranoid accusations. It is not obviously possible for the FBI and Saathoff to prove that there was no wrong doing. Sunshine into their processes might have obviated our suspicion, but it may be too late to trust them.

[10] David Willman, *The Mirage Man: Bruce Ivins, the Anthrax Attacks, and America's Rush to War* (New York: Random House, 2011): 279. It should be noted that Willman does seem to believe that Ivins was guilty. His book is primarily a critique of the FBI's handling of the case.

[11] Annette Hansen, "Shrink Wrap News: Use of Psychological Profile to Infer Ivins's Guilt Is Problematic," *Clinical Psychiatry News*, June 21, 2011, accessed November 20, 2014 http://www.clinicalpsychiatrynews.com/views/shrink-rap-news/blog/use-of-psychological-profile-to-infer-ivins-s-guilt-is-problematic/f0c12d12ab.html.

The EBAP's central claim is that Ivins was not just suicidal but homicidal, and his homicidal tendencies should have made him ineligible for the type of work he was engaged in – the designing of counter-measures for impending biological threats. Thus, his mental illness contributed to a predilection to imagine and carry out uses for the biological agents he worked with. Yet, is this not what is required of the defensive bioweaponeer? What makes biological weapons experts like Bill Patrick, Ken Alibek, and Sergei Popkin so valuable to the US Government is their ability to envision our viral apocalypse.[12] This is hyperbolic – Patrick stopped making weapons when such research was outlawed by Nixon in 1969, and what makes Alibek and Popkin seem reasonable is their various ethical objections to the Soviet weapon programs. Still, these experts have a professional form of split-personality. They must invent the weapon in order to invent the defense. They are required to invent but forbidden from using bioweapons. The difference is significant yet problematic. Defending against biological attacks requires finding the bioweaponeers *before* they attack, bioweaponeers who are still in the imagination phase. Kurtz's crime was one of these, a crime of wrongful imagination. He was the wrong kind of person to be imagining such things, and since it is difficult to put someone's imagination on trial, the possession of certain materials made him suspect. Ivins' crime was different. The material links to the attack are difficult to substantiate, but his imagination was made visible by forensic psychiatry. By the lights of the rhetoric of defense, however, they are the same. Both Kurtz and Ivins are the wrong kind of people. Both handle materials they should not have access to; neither can

[12] Bill Patrick was a microbiologist who worked at Fort Detrick during both its offensive and defensive missions. As part of the latter mission, he took part in the debrief of Ken Alibek (Kanatzhan Alibekov), a former Soviet bioweaponeer and author. Alibek defected to the US in 1992. Sergei Popov was also a former Soviet bioweaponeer who defected to the UK in 1992 and now sits on the faculty at George Mason University.

account for what they have done given the standards set by the FBI. Nor, as I argue, could they.

5.2 CONCLUSIONS: RISK, PARANOIA, AND THE PROBABLE IMPOSSIBLE

The rhetoric of defense and the paranoid attitude, the ways of thinking which I argue motivate much of contemporary bioterror and biosecurity talk, developed out of a complex political situation but can nonetheless be captured in simple terms: we cannot know what our enemies will do so, in order to defend ourselves against secret enemies, we must remain two steps ahead of them. The rhetoric of defense in both its Nixonian form and the form it takes within Lakoff's "generic biothreat" is a paranoid rhetoric insofar as it starts with what is surely a matter of fact: our evidence about future events is underdetermined. Whereas the skeptic might caution restraint or further study of the problem, the paranoid leaps one step ahead and advocates for a study of solutions which presume the appropriateness of a particular version of the. In the case of Galamas, the paranoid presumes possession of the true meaning and consequences of some phenomena. In stories about biothreats and bioterror this involves several important interpretative and narrative moves which bear restatement.

At the heart of any human-caused biothreat exists a conjunction between two elements: materials and motives. Before a confession or an informant arrives on the scene, the event is named with whatever sparse resources are available. Sometimes the first name given to an event is sticky even as evidence emerges that would seem to prove that original name to be a poor fit. The stickiness of the 'food poisoning outbreak' in The Dalles works this way. What drives naming, I have argued, is attitude. While the skeptic proposes many

hypotheses, all are undetermined. There is no certain proof. The paranoid, on the other hand, knows that the apparently disconnected network of facts are linked together within a relevant context and flow from a single, self-evident object of suspicion that must prove itself to be otherwise. While anyone can perform these attitudes (and often a single individual performs a combination of both), we find in the stories of biothreats a series stereotypical characters which typify the two attitudes: the rigorous but ultimately unhelpful scientist and the roughshod but ultimately pragmatic criminologist. In the brief struggle over the forensic methods used in the Amerithrax case, the FBI explained an important difference between scientific investigators and criminal investigators. Whereas scientific investigators are limited by their methods, criminal investigators have no such problem. Crimes cannot be solved by scientists; Török and his colleagues made this clear in their paper as did Congressman Weaver during his speech on the House floor. It is not the job of epidemiologists to find bioterrorists because they are simply not able to draw the right kinds of inferences. This, on its own, seems like a reasonable claim. The scientist acting as scientist may only be able to hypothesize in such a complex case with such sparse evidence. This is why we leave it to judges and juries to decide guilt or innocence; we rely on deliberation and judgment *about* expert testimony. Evidence requires inferential leaps, and the FBI claims authority over that realm. As master interpreters they are capable of discerning Ivins' mental states, his motives, his secret messages, the reasons for his strange comings and goings, and also the actual implications of the forensic clues analyzed by the scientific experts who assisted in the case.

In the case of motives, the superiority of the criminal investigator is more obvious and is granted outright by Török et al. However, materials also prove to be extremely ambiguous and in need of careful interpretation. This problem was on display during both the FBI raid

on the Rajneeshee ‘germ lab’ that failed to raise the suspicions of the skeptic and the installation materials in Kurtz’s home that fueled the paranoid narrative that grew around him. This problem is not unique to bioterror, but bioterror and biosecurity are intimately concerned with it as a variation on the dual-use dilemma. In short, a dual-use technology is any technology which has both civilian/peaceful and military/weapon applications. Within the narrative of dual-use, certain technologies are ambiguous and suspicious without the proper context or user. As a result, we must be careful about where these technologies are sent and who gains control of them. Within the context of bioterror narratives, we find something like a special, extreme case of the dual-use problem. In the almost comic case of the Rajneeshee, a biological agent which was purchased legally through a laboratory supply company was grown by a nurse who was trained as a medical health professional. Even when investigators discovered the materials in the lab, within proximity of a disease outbreak, it was not clear to them that the materials and the outbreak were related at all. They hypothesized that any clinical researcher might use such samples to study disease. Thus the apparently prophylactic can be the actually dangerous. In the case of Ivins, as told by the FBI, the very anthrax which Ivins had used to do bona fide research was converted into a weapon. Thus the actually prophylactic can also be the actually dangerous. Finally, in the case of Kurtz we have the perverse extreme. A professor of art with materials which a hazmat team claims are unequivocally not dangerous is doggedly pursued as a criminal. Here, the forensically benign can paradoxically be the actually dangerous. This is a peculiar sort of ambiguity in that it is only a potential ambiguity. Except within the narrative of the NAS Review, the narrative discarded by the FBI, Ivins’ RMR-1029 flask is actually ambiguous. Any given biological agent is in principle ambiguous, but within the context of some situation or case all ambiguity

is written over by that agent's proximity to an appropriate object of suspicion like Ivins or Kurtz.

There are two reasons why dual-use represents a problem for deliberation about biothreats. First, there is a diversity of human motives. That is, contra the story of technological determinism, dangerous technologies are the products of dangerous motives. Second, the possibility of danger is not sufficient to make a given technology forbidden. Thus, it is both necessary and unjustified to possess biological agents and the relevant skills necessary to prepare and use them. This paradox is written into both international and US law and announced by Nixon in his simultaneous renunciation of biological weapons research and promise to keep America safe through defensive biological research. Take, for example, the strange qualification in U.S.C. 18 §2332a which defines an offender as, "person who, *without lawful authority*, uses, threatens, or attempts or conspires to use, a weapon of mass destruction."[13] Perverse though it may be, the law seems to allow for the possibility that a weapon of mass destruction could be used through some lawful authority, and in fact this is exactly the implication of U.S.C. 18 §175 (the section amended to match the Biological Weapons Convention), which states that possessing biological agents is illegal except for, "prophylactic, protective, bona fide research, or other peaceful purposes."[14] There is a way to talk about using a biological agent legally, perhaps through some sort of "bona fide research" (an undefined term in the US Code).

Through the law and the repetition of case narratives, the attitudes that built those cases faded from view. The re-imagination of biothreat history is continuous. That is, when Nixon makes his renunciation he approves a reshaping of the bioweapon research that

[13] U.S. Code 18 (2008), §2332a, emphasis added.
[14] U.S. Code (2002), §175.

preceded him. By Nixon's account, it had never been the case the United States was seriously interested in pursuing the use of biological weapons. The biological research and stockpiling of biological agents was a mistake, a consequence of the biological research unit having poorly elaborated goals. Nixon's speech is an inflection point at which particular research practices which were formerly understood to have been part of an offensive program take on new meaning under the rubric of defensive research. However, this reimagining is carried forward by the search for the real and imagined enemy. As advancements in biotechnology emerged in both the US and abroad, it became possible to understand those advances as not only advancements but catastrophes waiting to happen. During the 1990's, as the public and political conversation grew and the response to health catastrophe's shifted from a logic of prevention to a logic of preparation, fragments of the bioweapon history (i.e. the Rajneeshee food poisoning) were reimagined into a new history, the history of bioterrorism. Thus, bioterrorism is tightly bound up with the imagination. Not only does it emerge from an imagined history, but the material for that history in the rhetoric of defense is already an imaginative one. For this reason, it is not surprising that it functions so effectively as a risk discourse, especially when enacted imaginatively in 'games' and other simulations.

When the paranoid attitude is directed at biothreats, especially in the form of the rhetoric of defense, it creates narratives with non-trivial and material consequences because the narratives define events and ascribe guilt. They are narratives which purport to ascertain the 'true meaning' behind some human activity. By using paranoid narratives in pursuit of their institutional goals, criminal investigators claim narrative and definitional authority, they wrest control over not just the event but the response to the event. Since the terrorist deserves to die, naming the terrorist implies already the acceptable outcome. Thus, even if we believe

that those who use speak through the rhetoric of defense mean well, they are stealing away from the non-expert an important deliberative opportunity. They erode away the arguableness of the matter, and this erosion is facilitated by the skeptics who mistake their inability to draw certain conclusions as a problem. By devaluing skeptical narratives the practical value of paranoia (i.e. quick action) has no dialectical check.

Perhaps we should be optimistic that after the Tuskegee experiments were uncovered in 1972, human experimentation was no longer considered bona fide research. Perhaps it is more charitable to imagine that the FBI pursued Kurtz so doggedly because there exists a well-documented genealogy of academics who go too far in the name of research or art. Yet, this is not at all the obvious way to fit these cases in the history I've constructed in the previous three chapters. The Tuskegee researchers, after all, were not independent researchers working on the fringes of research. They have more in common with Ivins than Kurtz. What they have in common with Ivins, and the sheep at Skull Valley, is a proximity to the government. Even though there are mechanisms in place to make it difficult for the innocent to be brought up on false charges, Kurtz was able to be pulled through the courts for almost half a decade before the FBI was left with a single indictable charge that was ultimately thrown out. Ivins, of course, had no such luck. He was neither charged nor indicted before collapsing under the weight of what was happening to him. Further, within the story about Ivins-as-terrorist, his suicide only serves as further proof that he was unstable and desperately attempting to maintain control and the illusion of his own innocence. As a scientist, he lacks the appropriate skill to account for his own actions. Even his attempt to free himself from the investigation makes him seem guiltier. The psychological story told in the *Summary* makes clear that all of his actions are suspicious.

This dissertation sought to construct and make visible a particular way of thinking about and talking about a peculiar kind of hazard called bioterrorism. As a risk, it tells about the possibility of a future catastrophe. Talking about the narrative components of such a catastrophe is easy, but using history to configure them definitively turns out to be quite difficult if we are rigorous in our analysis and ignore the paranoid roots of the narratives that built the original history. The two central components which are involved in the cause of a bioterror attack are a kind of person and a configuration of biological materials. In principle, there should be no great difficulty in describing such an event: imagine some person wishing to create great fear within a civilian population who creates a stockpile of bird flu and then spreads it. This prospect seems easy to imagine on a grand scale, but is there precedent for it? That is, can we find examples of these kinds of people either actually or almost coming into intersection with a similar configuration of biological materials? Certainly in the Rajneeshee food poisoning and the anthrax mailings a similar configuration of biological materials were present and real harm was done to people as a result of their use. It seems trivial to think of the contaminated salad and envelopes as weapons in this regard. However, what of the question of motive? The Rajneeshee certainly had political motives, but these motives were directly manipulative. Their ultimate goals were to electioneer, though they did disrupt local economics and cause a public health crisis. And what were the goals of Bruce Ivins? His goals, even as hypotheses, were a strange combination of revenge and self-promotion. The FBI suggests that he wanted to play the part of the terrorist as a kind of silent extortion, but to play the part of the terrorist with biological weapons is to be a bioterrorist. Only a certain kind of person can imagine let alone actually use such technologies.

Currently, these cases can reasonably called a kind of terrorism because of a forced judgment within the legal definitions of terror that was both a leftover from the rhetoric of defense and the reinvigoration of paranoid through the Patriot ACT. Since a terror attack is any attack in which there is the apparent intent to terrorize and any weapon of mass destruction is assumed to be the kind of thing, if used, that will create terror, then any use of a weapon of mass destruction will create the appearance of an intent to terrorize. Thus, while motive is, in principle, a key element in defining bioterrorism it is necessary in a highly delimited way. Yet, as we saw in Ivins, it is not the apparent but the occult motive which makes the story cohere, defines the case, and makes appropriate Ivins' death. As I have repeatedly suggested, even if we think that Ivins is guilty we should still worry about the way in which the case is presented and reflected on. Problems which, as I have framed them, are material but have at least partly rhetorical causes. Yet, what one should do about any of these problems is not entirely clear from what I have said so far. However, as I suggested in Chapter 1, there is a kind of cure within diagnosis. That is, by seeing the tools of the persuader the audience may find it easier to resist being persuaded. This is helpful, perhaps, but hardly sufficient given the both the enormity of what I have suggested and the preliminary nature of this investigation. In what follows, I suggest what prospects there are for rebalancing the dynamic between skepticism and paranoia as well as penetrating the closed loop of biosecurity talk about biothreats.

5.3 PROBLEMS AND PROSPECTS FOR AN ALTERNATIVE RHETORIC OF BIOTERROR

As I have argued so far, there are two related reasons to be concerned about the way in which biothreat narratives are constructed and put to work both of which stem from a continued imbalance between skepticism and paranoia. It will be helpful to say a bit about the practice of Risk Analysis generally in order to show the different ways in which definition can operate within risk modelling. There are good reasons to be optimistic that newer models of Risk Analysis might be, generally, more amenable to transparency and non-expert participation. Thus, in defining some particular risk it might be that much helpful work can be done at the structural level to ensure that risk deliberations are more balanced. However, since part of any deliberation about a particular risk (i.e. some particular technology that may represent a biothreat) will necessarily appeal in some way to histories and experts about that risk type in general (i.e. bioterror in general), we should remain concerned with how the history of bioterror writ large is deployed and used as a warrant for responsive action. Both of these steps require the reinvigoration of a skeptical attitude which can push back in a more substantial way than Török et al.'s and the NRC's. In my final section I will speculate briefly about the available resources for ways of talking which might help rebalance the skeptical-paranoid dynamic.

5.3.1 Risk Analysis Models and Structural Prospects

Within the field of Risk Analysis, the problem of definition is, thankfully, already an important one, though the thinking about how definition should operate in Risk Analysis has

changed significantly in the last two decades has shifted significantly. In 1983, the National Research Council (NRC, the same group who sponsored the NAS Review of Amerithrax) published *Risk Assessment in the Federal Government*, a volume which should to define, describe, and defend procedures for both Risk Assessment and Risk Management within matters of regulation and public policy.[15] In that volume, a model of Risk Analysis was proposed that built an expert firewall between the stages of the process. The model is visualized below.

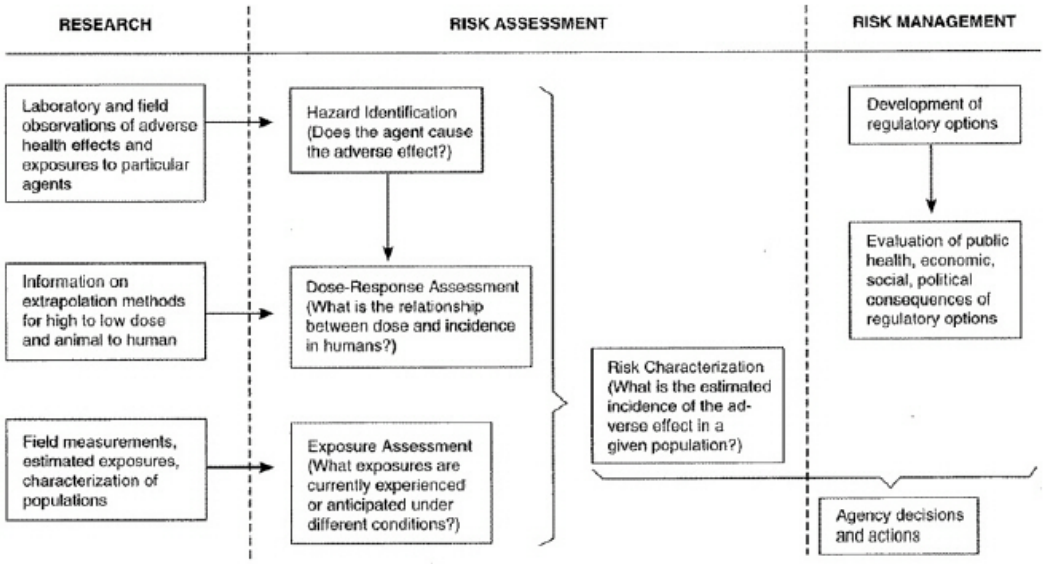

Figure 4 Elements of risk assessment and risk management[16]

What is of note in this model, for our purposes, is the way in which Risk Characterization (i.e. the stage in Risk Assessment in which the respective risk is finally defined for the purposes of Risk Management) is an expert process that relies entirely on scientific methods and the deliberations of scientists and, eventually, government agencies. Within this model,

[15] National Research Council, Committee on the Institutional Means for Assessment of Risks to Public Health, *Risk Assessment in the Federal Government: Managing the Process* (Washington DC: National Academy Press), 1983. For A more thorough account of the problems with the Risk Assessment models in this volume see especially Kristin S. Shrader-Frechette, "Evaluating the Expertise of Experts," *Risk* 6 (1995): 115-126.

[16] National Research Council, *Risk Assessment*, Figure 1-1, 21

then, definition is taken to be an expert process, not one that could be given up to the judgment of the non-expert citizen. It is easy to see how an expert in such a framework might adopt the way of talking used by Galamas in Chapter 1. If we take the structure seriously, it really does look like a non-expert might rightly be called ignorant about what a particular, expert-crafted definition means. However, in 1996, the NRC published a new guide to Risk Analysis, *Understanding Risk*.[17] In that volume, the NRC defines a new model for Risk Characterization – a model they describe as "iterative, analytic-deliberative."[18] The shift in thinking for this new model is the understanding that risk characterization can be made better by the inclusion of non-expert citizens in the process, especially when the relevant risk or its management will affect the lives of those citizens. This new model does not contain the expert firewall of the previous model, and instead attempts to include recursive steps in the process of Risk Characterization:

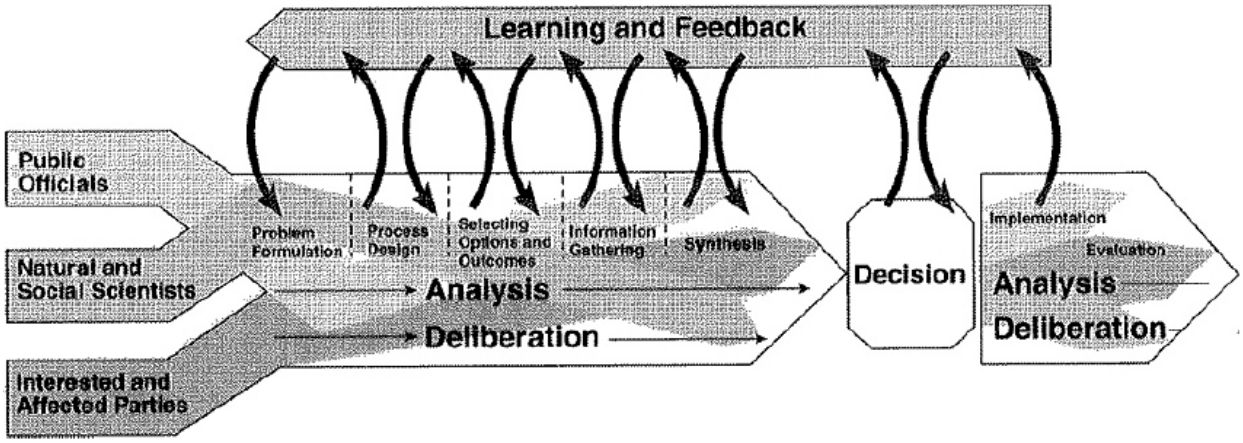

Figure 5 A schematic representation of the risk decision process[19]

[17] Paul C Stern and Harvey V. Fineberg, eds., *Understanding Risk: Informing Decisions in a Democratic Society* (Washington DC: National Academies Press, 1996). It should be noteworthy and encouraging to the humanities researcher that Shrader-Frechette (a Philosopher) as well as Shelia Jasanoff (a Professor of Science and Technology Studies) sat on the committee that developed this volume.

[18] Stern and Fineberg *Understanding Risk*, 27.

[19] *Ibid*., Figure 1-2, 28.

In this new, more complicated model, "Interested and Affected Parties" are apparently included in the process from the beginning and are able, in some way, to deliberate with experts prior to decisions about the character of the risk in question. Thus, the non-expert is recognized actually as a kind of expert: an expert, perhaps, in their own lifeworld and in interpreting expert knowledge for practical purposes. Further, they are at least potentially included in the process of coming to judgment about the relevant decision point. This framework is conceptual and very challenging to implement, but it at least provides a way to envision a deliberation about definition in which expertise might not, in principle, eclipse judgment. The practical upshot of this system for the risk analyst, it is argued, is more effective risk analysis because, "[t]o get the right science, it is necessary to ask the right questions," and asking the right questions is, "not a straightforward task" at the level of science or practice.[20] Asking these questions requires talk about values in a way that scientific and security experts have no special training in. Yet, if done right, the process might build trust. Here, getting it "right" means four kinds of getting right: getting the science right, getting the right science, getting the participation right, and getting the right participation.[21]

'Getting it right' requires attention to the situation. Situations are particulars (the realm of rhetoric), and *Understanding Risk* admits that getting it right will be hard and will often seem impractical.[22] In an appendix to *Understanding Risk*, much work is highlighted to demonstrate some possible models for public participating in the risk assessment process, but almost all of the work referenced is, while excellent, done by sociologists, psychologists, and

[20] *Ibid*., 29.
[21] *Ibid*., 132.
[22] *Ibid*., 133-140.

scientists interested in questions of policy. That is to say, it is very difficult to find the work of a communication scholar, much less a rhetorician, in the bibliography. Perhaps if the volume was more recent, this would not be the case. Yet, since Habermas' *The Theory of Communicative* (1984) or even Toulmin's *The Uses of Argument* (1958), public deliberation has been of particular interest for Argumentation and Debate researchers. For those taking a longer view, it might be fair to say that this has been the specific domain of Rhetoric since Aristotle divided arguments into those with necessary conclusions and those which admit of deliberation. In short, this is our wheelhouse. William Rehg has encouraged case-oriented research and intervention into matters of both complex scientific deliberation and policy-oriented science deliberation, but his work is, in my view, both overlooked and under-cited.[23] Communication scholars, especially those who use the diverse tools of rhetorical studies and debate, are well situated to contribute helpfully to both the general and specific problems outlined here. Events like public debates and consensus conferences are well-studied in the field of argumentation, and problems related to bioterror desperately need the attention of researchers in those fields.

Many of these types of tools are best suited to the moments which exist prior to the kinds of crisis-events which I described at length in Chapters 3 and 4. The divide between risk communication and crisis communication is an important one because each involves different values and will, in turn, require different approaches. It would be ideal to redefine our terms *prior to* a crisis. At length public deliberation is a method that can only be carried out when there is time to do so, but we should accept this caution only so far. Paranoid ways of understanding bioterror risk may be capable of understanding our current state of risk as a

[23] William Rehg, *Cogent Science in Context: The Science Wars, Argumentation Theory, and Habermas* (Cambridge, MA: MIT Press, 2009).

continued crisis. There surely will be moments in which keeping humans safe is the first priority and worrying about the narrative description of a criminal may be over-anxious. However, during a crisis the name of the crisis itself may affect how officials respond and the public feels.[24] Terms tell us how to respond but we may already have attitudes about how ready we are to respond. It is perhaps not surprising that few feel ready or adequate to respond to a viral apocalypse.

5.3.2 New Ways of Talking

Thus far I have considered prospects which involve altering the relationships between speakers and decision makers, changing the workflow that produces and responds to major risks. However, many may be pessimistic that merely altering the relations between parties will be sufficient to do much work in this arena since it would seem that paranoia so naturally dominates. The simulations done to model bioterror attacks and epidemics are quite chilling and have consistently persuaded politicians to respond. Paranoia is often practical and even more often it acts as a persuasive fear appeal. Thus, relations aside, we need both new terms and new argumentative styles which can recognize the value of paranoia without giving in to it entirely (as I have argued that Török et al. did) and without looking ineffectual (as I have argued the *NAS Review* did).

[24] G. Caleb Alexander, G. Luke Larkin, and Matthew K. Wynia, "Physicians' Preparedness for Bioterrorism and Other Public Health Priorities," *Academic Emergency Medicine* 13, no. 11 (2006): 1238-1241; Sandra N. Lightstone, Charles Swencionis, and Hillel W. Cohen, "The Effect of Bioterrorism Messages on Anxiety Levels," *International Quarterly of Community Health Education* 24, no. 2 (2005): 111-122.

Terrorism is a powerful term that evokes disgust even as it is intangible.[25] Carus has already recognized a category of event which he calls "Biocrime," though that term has not found much use in the public conversation about biological weapon.[26] Carus was never attempting to put it into wide circulation. Legal scholar Barry Kellman has suggested the use of the term "bioviolence" as an alternative umbrella term which might get away from the problem of terrorism, but that term has also had restricted circulation within academic contexts.[27] More work needs to be done to find the limits of talking about bioviolence in contrast to bioterrorism, though, as Kellman suggests, it would be most helpful as a legal term so that it could more easily shape questions of policy and government response. Ultimately, it would seem, solving the rhetorical problem of bioterror may require the same kind of actions that created many of the problems identified in previous chapters: legislative actions. That is a long road. Still, terms like biocrime and bioviolence present themselves as overlooked inventional possibilities. That they are underused is proof only that they have been ineffective so far. Perhaps rhetoric can help cultivate and deploy these and similar neologisms in new and interesting styles into new and interesting rhetorical situations.

The prospects for such cultivation may be present in the rhetorical theories of Kenneth Burke, a framework which I suggested in Chapter 1. One of the advantages to the dramatistic theory of Burke is the way in which it invites and provides a framework for narrative

[25] In this way, terror may operate as what Richard Weaver has called a Devil or even a Charismatic Term or perhaps what Michael Calvin McGee has called an Ideograph. See Richard M.Weaver, *The Ethics of Rhetoric* (Davis: Hermagoras, 1953); Michael Calvin McGee, "The "Ideograph": A Link Between Rhetoric and Ideology," *Quarterly Journal of Speech* 66, no. 1 (1980): 1-16.

[26] W. Seth Carus, "Bioterrorism and Biocrimes: the Illicit Use of Biological Agents Since 1900," (Working paper, National Defense University, Washington DC, 2001), accessed November 30, 2014, http://www.dtic.mil/dtic/tr/fulltext/u2/a402108.pdf.

[27] Barry Kellman, *Bioviolence: Preventing Biological Terror and Crime* (New York: Cambridge University Press, 2007).

alternatives.[28] The focus on Bruce Ivins' metal troubles is an exemplar of Burke's Guilt-Redemption cycle. As a scapegoat, Ivins bears the sins of USAMRIID and the FBI, and his death is acceptable exactly because it is just for him to die and we are safer for it.[29] Burke would suggest something further; Ivins' death is not only appropriate but required to complete the cycle and heal the wound caused both by the attacks and the presentation of Ivins dead body.[30] This necessity, Burke thought, could only be countered by countering tragic narratives with comic ones such that the human actor (the actor who would be the scapegoat) was understood to have been mistaken and not vicious.[31] For Burke, the comic corrective was a way for a community to tell stories about history in which, for instance, a criminal was fundamentally the same as the community. Perhaps there is, for bioterrorism, a comic frame that can help make someone like Ivins able to account for himself while still making it possible for citizens to judge his guilt or innocence.

Burke's rhetorical theory and similar tools also point to adjacent work being done both in Sociology and Communication Studies which attempt to, in a variety of ways, blur the distinction between the material and the discursive as well as the social and the technological. Bruno Latour especially has argued and pursued a variety of investigations which show that the way in which we commonly talk about humans and technology tends to obscure the ways

[28] For a thorough summary of ways in which Burke might aid the critic (especially the media critic), see Barry Brummett and Anna M. Young, "Some Uses of Burke in Communication Studies," *KB Journal* 2, no. 2 (2006). For more specific case studies in which Burke's theory is used to both analyze and offer correctives for criminal events, see Mari Boor Tonn, Valerie A. Endress, and John N. Diamond, "Hunting and Heritage on Trial: A Dramatistic Debate over Tragedy, Tradition, and Territory," *Quarterly Journal of Speech* 79, no. 2 (1993): 165-181; Brian L. Ott and Eric Aoki, "The Politics of Negotiating Public Tragedy: Media Framing of the Matthew Shepard Murder," *Rhetoric & Public Affairs* 5, no. 3 (2002): 483-505. For a similar approach to scientific arguments (specifically sociobiology), see John Lyne and Henry F. Howe, "The Rhetoric of Expertise: EO Wilson and Sociobiology," *Quarterly Journal of Speech* 76, no. 2 (1990): 134-151.

[29] Kenneth Burke, *Permanence and Change: An Anatomy of Purpose* (Berkeley: University of California Press, 1984).

[30] For more on "the Kill" and its necessity, see Kenneth Burke, *The Rhetoric of Religion: Studies in Logology* (Berkeley: University of California Press, 1970).

[31] Kenneth Burke, *Attitudes Toward History* (Berkeley: University of California Press, 1984).

in which technologies can and do act both on and with humans.[32] Latour proposes that we seriously consider the fact that technologies (non-humans) affect the motives of humans and actually act with humans, creating hybrid actors which should be understood and talked about as such. This is not, for Latour, merely a statement about how we can talk about technology but an argument about what actually is the case. His claim is ontological. For some this may be implausible, but it seems an especially fruitful avenue for critiquing arguments about dual-use technology which seem to claim that technologies can be neutral or politically ambivalent prior to human use. This is a difficult and contested area, but it seems like an excellent point of departure for the rhetorician who may be willing to blur, at least temporarily, the line between doing things with words and doing things with things. Biotechnology will remain an important area of study for those interested in the dual-use problem (even for those who will claim it is an ontological misnomer), especially as the fields of nanotechnology and cybernetics increasingly blur what might count as the biological. As the category of the biological grows unstable, so do our stories and laws about biological weapons. Rhetorical scholars are well positioned to find better (in the pragmatic sense) ways of talking.

Burke's work on the comic also points to what I have found to be the most troubling problem in the case against Ivins and the actions taken against Kurtz – the systematic insistence of the existence and vilification of irrationality which flows naturally from the rhetoric of defense. When Nixon declares that only the non-rational actor would use biological weapons, he creates not just an enemy or an evil empire, but an enemy which in principle cannot be talked to, reasoned with, or even understood. Eric King Watts has recently warned against political arguments which seek to make a whole group of people

[32] Bruno Latour, *We Have Never Been Modern*, (Cambridge: Harvard University Press, 2012).

unreasonable, unaccountable, and irrational. By drawing links to colonial and contemporary arguments about zombies, Watts suggests that when an adversary cannot be reasoned with the only appropriate response is violence.[33] As it relates to bioterror, however, the problem is much larger than a political one – insofar as we mean politics in its more common usage. With Ivins, much is made of the assessments of psychologists about his mental state. Something is actually wrong with Ivins' mind/brain which makes him untrustworthy, but it seems to evoke neither attempts to understand nor sympathy. Mental illness presents a challenge to a variety of related fields relevant especially to the problems identified in this investigation: health communication, the philosophy of action, the philosophy of science, medical humanities, etc. Even if rhetoricians wish to remain committed to a model of disease in which mental illnesses are not just real but real illnesses, they might identify with the critique of psychiatry offered by Michel Foucault,[34] the Wittgensteinian approach to mental illness offered by Carl Elliott,[35] and the continued attempts to make sense of the long debate created by the work of Thomas Szasz.[36] What all three have in common is an abiding concern that there is something deeply wrong with the way in which we talk about and treat the mentally ill in terms of both accuracy and ethics. In my own investigation I would like to

[33] Eric King Watts, "The Constant, Collective…Incessant Moan: Reanimating Zombie Voices," (The Carroll C. Arnold Distinguished Lecture, National Communication Association Conference, Washington, DC, November, 24 2013).

[34] For Foucault's critique of psychiatry see both Michel Foucault, *Psychiatric Power: Lectures at the College de France,* 1973--1974. Vol. 1., trans. Graham Burchell ed. Arnold I. Davidson (New York: Macmillan, 2008), and *Madness and Civilization: A History of Insanity in the Age of Reason*, (New York: Random House, 1988).

[35] Carl Elliott, *A Philosophical Disease: Bioethics, Culture, and Identity* (New York: Routledge, 1999). See especially Chapter 4. Importantly, Elliott seems to want a view of mental illness which both holds the mentally ill responsible for his or her actions while still forgiving and being compassionate.

[36] For a rhetorically interesting, recent salvo into the "mental illness as a myth" debate see Neil Pickering, *Metaphor of Mental Illness* (New York: Oxford University Press, 2006). It would seem to be Pickering's position that since we have a shared conception of mental illness, it must be real. For those both for and against the rhetoric-as-epistemic argument, this view should be provocative, especially as Pickering (a Philosopher by training) gives serious treatment of metaphor as a way of knowing. It may be of interest to some that one rhetorical scholar, Richard Vatz, has been addressing (and largely rebutting) Szasz's arguments in both popular arenas and with Professor of Law Lee Weinberg in legal journals since the early 1980's.

underline these concerns and also add a more egoistic problem too: the way in which we imagine and talk about so-called irrational actors within homeland security may make it impossible to have a substantive discussion about what might actually make us safer.

Finally, what may be most important is for those deploying skeptical rhetoric to meet the real burden set by narratives of paranoia: show how skepticism can be practical. When talking about risks and criminal investigations, it borders on meaningless to say that the evidence is insufficient to demonstrate some conclusion with certainty. The basic premise of both risk analysis and criminal investigation is that we do not yet have the whole story and, in both cases, we may never get it. We may not get it because there is no story or we may not get it because it will be too late. Thus, the skeptic begins to look like a fool when he or she repeatedly states that deriving a conclusion is not possible. This stylistic choice was what allowed the FBI to so easily brush off the NAS's review of their forensic procedures. What we need is a practical form of skepticism, the form of skepticism which is hopefully embodied in the four-fold 'getting it right' structure of the analytic-deliberative risk analysis model as well as the perspectival rhetorical theory of Burke. One problematic but nonetheless creative voice who has discovered such a way to talk is climate skeptic/denier Bjorn Lomborg. Lomborg is a controversial and arguably dishonest speaker, but Lyne suggests that we ought to take careful note of his rhetorical strategies which paradoxically grant the scientific conclusions of his opponents while rebutting their suggested responses on practical grounds.[37] It should be no surprise that this form of skepticism is more effective in public fora than the methodological skepticism which admits its own uselessness. Such talk helps in the lab, but not during a criminal investigation.

[37] John Lyne, "Rhetoric and the Third Culture: Scientists and Arguers and Critics," In *Rengaging the Prospects of Rhetoric*, edited by Mark Porrovecchio (New York: Routledge, 2010): 132-152.

At the most general level, I have tried to show how contemporary talk about bioterror, bioterror attacks, bioterrorists, and bioterror risk uses problematic terms motivated by an unchecked paranoid attitude which makes stories about bioterror apparently impenetrable to critique. It is trivial to say that definitions are contingent or constructed socially, but hopefully it seems far less so to insist that when we use historical narratives to aid in inductive definition building, we should be concerned about how those narratives were built and transformed. If we ignore the origins and attitudes that constructed our histories, we risk internalizing them without reflection. Perhaps we would, after reflection, judge it wise to be presumptively paranoid about biothreats, but to skip entirely that stage of the deliberation and give it up to experts is short sighted. In his rebuttal to those who think that the bioterror threat is "overblown," international security researcher Francisco Galamas retorts, "if the threat is "overblown," why is there so much debate surrounding this issue? Why are scholars, military and intelligence personnel, and politicians devoting so much time, energy, and money to prevent a somewhat lesser threat?"[38] We should push back on Galamas' rhetorical questions with our own. Why were there so many stories about dead cows in Maryland in the 1960's? Why did the government spend so much effort trying to convict Steve Kurtz? All of these rhetorical questions have the same answer: paranoid narratives are (perhaps necessarily) part of the language of politics and criminal justice. Paranoia is persuasive, and, when unchecked with skepticism, it becomes authorized history. It is not at all clear that heated debate or the devotion of effort from within the military-industrial complex is somehow a sign that we have hit upon the best terms for a discussion. This is surely one of the insights shown by the collective efforts of Carol Cohn, Gordon Mitchell, and Gabrielle Hecht on the matter of

[38] Francisco Galamas, "Profiling Bioterrorism: Present and Potential Threats," *Comparative Strategy*. 30, no. 1 (2011): 88.

nuclear missiles. The reshaping of the 1984 Rajneeshee food poisoning shows how contingent the history of bioterror is, while the cases of Kurtz and Ivins show how problematic its consequences are. This investigation is not a call to eliminate from our vocabulary or public policy a notion of defense or risk, but a modest yet firm insistence that our vocabulary of defense should be effective and ethical. In my view, neither of these conditions can be met while our vocabulary of defense represents remains unquestionable and resistant to deliberation. Whether we empathize with Ivins, his alleged victims, or both there is much important work to be done by the rhetorican, the philosopher, the sociologist, the anthropologist, the activist, and the citizen in cooperation.

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