

LOS ALAMOS AND WEN HO LEE: MIGRATION, NATION, AND SECURITY

by

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abstract**LOS ALAMOS AND WEH HO LEE: MIGRATION, NATION, AND SECURITY**

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The Wen Ho Lee case involves touchstone sociological issues like immigration and ethnicity, the state ownership of secrets of military and technological force, and the definition and policies of national security. Given the international currents of the post Cold War 1990s and Lee's position at Los Alamos National Laboratory, he became the classic scapegoat in a process in which elements of the Cold War security apparatus in this country were seeking to define the international threat picture and the possible rivals to U.S. power. As a perennial domestic dispute about foreign policy toward China raged on, and Clinton was pursuing a trade-based relationship with the People's Republic of China, a number of policy actors and agencies portrayed China as a hardline communist state and active military threat to the United States. The tenor of these claims increased from concerns about Chinese launching of European and American satellites, to allegations about PRC and People's Liberation Army contributions to U.S. political campaigns (although now curiously there is little interest in investigating the campaign contributions and connections of the purported double-agent Katrina Leung, who was a major Republican Party fundraiser and donor in California), to intelligence and security warnings about Chinese

espionage, to outlandish claims at the root of the Lee case that the PRC had stolen a wide variety of technological knowledge from the U.S. (which would supposedly allow them to fulfill their longtime goal of military modernization and thus become a major superpower threat to the United States), to the claim that it was Lee, a Taiwanese-born, U.S.-naturalized citizen who had worked for the U.S. government for more than twenty years, who was singlehandedly responsible for divulging a number of key nuclear secrets to the PRC, including the design codes and knowledge for the compact and powerful W-88 warhead.

Preface

This study aims to give a sociological accounting of the Wen Ho Lee Affair, in which the Taiwanese American Los Alamos code physicist Wen Ho Lee was accused of treason in the theft of U.S. nuclear secrets. Why am I writing this study and what is my investment in it? First, Wen Ho Lee and his family are not only my old neighbors, they are my friends. I grew up with his kids and we shared a neighborhood, schools, friends, activities and adolescence in common. When the news about the Lee case broke in the outlandish *New York Times* articles written by Risen and Gerth of March 1999, I was puzzled and shocked. Teaching at Baruch College at the time, I remember going down the hall to the office of Barbara Katz Rothman, my mentor and friend and teaching colleague at Baruch, to discuss and mull over the situation with her. Already, in its initial stages, the story had all the trappings and drama of a major spy saga. Right away I feared that Dr. Lee, the mild-mannered and well-meaning soccer coach and cub scout den father of my youth, would be singled out and executed in a brutal echo of the Rosenberg case—and this was even before the FBI's malevolent threats to Lee that he would be treated like the Rosenbergs were made public.

In fact the web of social and affective ties is even denser and stronger than that. When Wen Ho Lee was my soccer coach in 1979-1980, he was coach together with Robert Vrooman, the CIA case officer who would become head of counterintelligence at Los Alamos and who would play a major role in the history and outcome of the Lee case (Vrooman's son Steve and Lee's son Chung were

also on the team).¹ In our local Cub Scouts of America den, Chung and Steve were also members and Sue Vrooman, then married to Robert Vrooman, was the Den Leader. Hence we had most of the meetings at the Vrooman house in La Senda, a wooded housing development with stables and large plots for each house running along the ridge of the Rio Grande Cañon and extending to the west to State Road 4 (on the other side of which is Laboratory Land). Los Alamos is a small town, and as such the social networks are very dense and interconnected. It is some of this sense of the social character and social networks of the town that I hope to portray here.

One of the most puzzling, and most notorious, things about the presentation of Dr. Lee in these stories was the way in which information about his person and his personal life was largely left out of the picture, even though the most drastic accusations and judgments were being made about him personally. The portrayal of him and, more broadly, of Los Alamos in the stories swirling about Lee simply did not square with the picture one would draw from knowing the Lee family or from more than a passing acquaintance with Los Alamos. Thus, among other things, I hope in this study to give more of a personal account of Wen Ho Lee himself, in contradistinction to the extreme characterizations which have all-too-abundantly been made about him. Indeed, I would maintain that the omission of a personal account of Dr. Lee, and the substitution of the picture of him as pernicious enemy of the state, is part of the racism and cultural nationalism underlying the case and of the logic of the bureaucratic National

¹ Carl Newton, a Los Alamos geophysicist who would become a major supporter of Lee during his trial, was also a coach of this team. Carl's son Randy was a member of that soccer team and of Cub Scout Troop 326 of which we were all a part.

Security State, all of which must focus on specific aspects of an individual to the exclusion of taking account of their social life and their personality in a more complex sense. And is not this disjuncture between individual personal life and the operation of bureaucracies, societies, and nations (which often instrumentalize individuals and treat them according to singular aspects of their identity or labor rather than in terms of their whole social being) not a major aspect of the study of sociology? What was shocking, then, in those first major reports on the Lee case, was the way that someone that I knew, and knew well, was being presented as someone so entirely other to all the impressions and estimations that I held of him.

Despite the fact that Los Alamos is a small town with very dense and intercrossing social networks, and despite the acquaintance and friendship of many people in the town with Dr. Lee, the vehemence of the presentation of him as a spy was enough even to cause a great number of Los Alamosans to question their view of Lee and to become convinced, or at least shockingly suspicious, that he was indeed a spy—'and here living all these years among us too.' This strange deference to the government story on the part of many Los Alamosans, even in light of years of personal knowledge of the Lee family, is indicative of a social fact of the town which I will discuss at greater length in the ethnographic considerations of the town itself: the way in which personal, affective social ties are situated in relation to, and sometimes in contradiction to, demands of loyalty to the state which are necessary in national security work. Thus the supposed secret information of the government prosecutors and the

aura of national security led many in the town to conclude, especially early on, that Lee must in fact be guilty. It bears noting that this attitude was hardly totally dispelled by the happy release of Dr. Lee from jail in September 2001 and the large and emotional welcoming home party at the Lees' house on Barcelona Avenue in White Rock, a sub-division of Los Alamos in which La Senda, mentioned above, is to be found.²

The federal government and the news media are both powerful sources of influence and they both carry and rely on a certain assumption of authority and of correctness—whether it be the standard of journalistic objectivity and information dissemination or the weight afforded to the word of law enforcement and prosecutors when they make a case. In the Lee Affair both of these sources of authority would be used to establish the case, would be abused to make him out for what he was not, and then would be exposed and reprimanded for their overzealousness and their interference in democratic process. Yet, the legacy of the case and of these issues remains open and indefinite, and Lee is still glibly and simply referred to as a spy, albeit one who somehow had the wiles to get away. While the Affair is about this public spectacle of the suspect Wen Ho Lee, the immediate context of the case and the facts in dispute are Wen Ho Lee's life and times in Los Alamos: that town where 'community' is to a significant extent

² In fact, the Lee house is only a few hundred yards from La Senda where it begins at the intersection of Sherwood Street and Pajarito Loop. The Lee house is on Barcelona Avenue, third house up from Sherwood.

the community of the Laboratory and the extended community of the nuclear state.³

As such this is a community study, since the community of Los Alamos is significantly defined by the work of the weaponeers, but also inasmuch as there is a community life of social interaction within the town and with the surrounding area which defines the character of the community there. Although Los Alamos shares a number of social elements in common with other isolated centers of the nuclear state, it is, like each other site, uniquely situated in a certain geographical and historical context. The high desert mountain pine forest where Los Alamos is situated shapes the community in many ways. The laboratory and the town are both spread out on different mesas and among pine forests, and the peaks of the Jemez and Sangre de Cristo mountains, as well as the dramatic Rio Grande river valley, are all visible from the town. The air is thin in the mountains at 7,000

³ The United States' nuclear weapons research and manufacturing industry, like defense industries in general, is distributed throughout the nation and sites in Canada. Thus there are a number of communities, often small and isolated, which played key roles in the military aspects of the nuclear age. There is a kind of extended community among these locations, in the sense of a shared way of life and mission, and in terms of the fact that there is a great deal of cross-migration between these towns. Thus it is not at all unusual for families to move to or from Livermore, California (and Lawrence Livermore National Laboratory), or Oak Ridge, Tennessee (and Y-12), or Chicago (and Fermilab and Argonne National Laboratories), or Richland or Yakima (and Hanford Reactor), or Savannah River, South Carolina (Plutonium Production Reactors), or Denver, Colorado (and Rocky Flats), or China Lake in California (site of a naval weapons laboratory), or a number of other sites involved in this kind of government science and technology work. Social elements that these places seem to have in common are a sense of danger and of high security, a sense of working on important projects for the benefit of the government and the nation, and a high level of science and engineering education among the population. Also of course these places are all reliant upon a government bureaucracy (the Department of Energy or the Department of Defense and the Congress) for their work and their existence, and also for their oversight and their management and direction. Also, though, the scope of the Cold War nuclear state, to say nothing of the security state more broadly, was so great that enormous and well-entrenched bureaucracies were created and expanded in order to guarantee extensive production of nuclear weapons.

feet and the weather is usually mild and often dry in summers and winters are frequently cold and bring repeated snows (temperatures well below freezing are not uncommon). In fact ski areas are located at both the Jemez and the Sangre de Cristo mountain ranges, and the Los Alamos ski mountain on the Jemez, like so much else here, owes its provenance to the Manhattan Project. European scientists who came to Los Alamos during the Project admired the mountains and thought them excellent for skiing. They quickly set about clearing a nearby slope for the runs. Town legend has it that Dr. George Kistiakowski, a Polish explosives expert during the Manhattan Project who had been at and would later return to Harvard, used some of the ample explosives they had on hand for experiments to knock down the trees. This story at once indicates aspects of the cowboy attitude of Los Alamosans, their can-do self-assurance, and their recklessness toward nature. Although, as a lifelong skier, I must admit that I do love the 'Ski Hill' and have been thankful to those who sought to set it in place.

Study of the community of Los Alamos is noteworthy not only for the high education level and the concentration of scientific research (about ten percent of the town population have PhDs, and the place has been home to a reactor, a linear accelerator, a massive computing facility and a number of other high-technology research instruments) and the influence that this has on the society of the town, but especially because there we are able to carry out an in-depth sociological study of a community where the science of weapons and destruction has been the order of the day for six decades, and where the everyday life of the town has been structured and influenced by this practice. One way or another,

i.e., more or less reflectively, people have been and continue to carry out this work and to integrate it with a vision of personal fulfillment and family life. This element of the society there has at least two important implications. For one, there is an existential and philosophical side where the history and effects of nuclear weapons (and other weapons of mass destruction, Los Alamos has been and is in the business of them all) and of nuclear science in general must be come to grips with. Whether it is the destruction of Hiroshima and Nagasaki or the contamination of Hanford and Chernobyl, the legacy of nuclear science since 1945 is great. Now, as much as ever, we are still in the grips of this historical dynamic as the game continues with North Korea, Iraq, Iran and the like. Second, the society of Los Alamos also provides an example of a community which was founded, in its modern guise, under strict secrecy and security, and which has lived with strict secrecy and security ever since. The necessity and the ongoing practice of secrecy and high levels of security have been the norm not only at the Laboratory, but within the community of Los Alamos more widely, since 1943. The place enables an empirical and ethnographic study of the sociology of the secret society, and particularly in its modern, twentieth century guise. As such it seems that the place is very germane for showing the interactional and long-term historical effects of security on community life.

As we have certainly been in a world where 'security' and 'national security' have been much lauded and talked about in the last few years, not to mention the last several decades, even while life security in most respects seems to be deteriorating, a social accounting of the way that interpersonal, institutional,

economic and governmental interactions are affected by security is crucial. All the more so because it seems we still stand at a historical crossroads where greater internationalism and less emphasis on national security and arms races could become a greater element of the international community and world affairs, even though the supposed end of the Cold War and the initiation of the War on Terrorism have been approached with such troubling securitization. If indeed there is a troubling relation between security and fear and nationalism, then it seems indeed that less ethnic nationalism and less fear of others (perhaps through face to face visitation and interaction) could help to reduce some of the current incredible excesses of the war state which thrives on discord and enmity. Los Alamos stands in a curious way in relation to these dynamics, on the one hand it has been a draw for scientists and engineers around the world and it continues to be, but at the same time it works primarily for a specific purpose and it is heavily involved in security both as business and as living environment. Perhaps in this respect it shows us some things about society and security in general.

Both the Wen Ho Lee Affair and the history of Los Alamos more broadly bring us to some immediate reflections about the purpose and the tone of writing. Related to this is the question of interlocutors and those with whom this study should be in dialogue. There is of course a historical and a sociological duty to try to discern how things are (and have been) and present them rigorously in a way that serves to establish the historical record. But the role of Los Alamos in the nuclear age and the episode of the Wen Ho Lee Affair both present problems

to a direct pursuit of value-neutral sociology. As the work of Los Alamos not only responds to a situation of world politics and militarism but also acts to create it, questions of the relations between people and states, and the means of resolving conflicts, are automatically entailed in the endeavor. Certainly, philosophical or social-ethical questions about working on weapons of mass destruction (the ethical problem of whether or not to do it and how to justify it) and the consequences of this work (the social, health-environmental, and psychological dimensions of it) are central to the social life of Los Alamos, even if these questions are not given their most urgent framing there. As per the Lee case, on the one hand there is the case itself, the 'facts,' the actors, the actions, and the like. One can and should devote attention to trying to understand these elements in terms of how they give shape to the social phenomenon of the Affair. Yet, on the other hand, the implications of the case extend well beyond the issue of guilt or innocence and who did what when. Complicating this issue is the fact that racism and security paranoia both played major roles in the case, and social forces like these don't necessarily unfold according to a timeline or a step-by-step presentation of events. And, while it is crucial to get the facts of the case in order, the situation in which Dr. Lee found himself is made up of a number of fundamental issues about the conduct of American weapons research (including its purpose, its organization and its future), about immigration to this country and the way that it is joined with construals of threat or benefit to it, and about the way that racism animates government action and social perceptions in the United States. In light of issues like these, sociological practice and duty require a

critical consideration of the fundamental questions of human existence in order to enable a rigorous presentation of the matters at hand.

Yet this account is also motivated by a deep fascination and personal attachment with Los Alamos. As a third generation Los Alamosan who grew up there, the influence of the place on my socialization and social senses has been immense. As my grandparents had lived in the town since 1946, town life and town history was a big part of the lore in our family. I grew up in the strange combination of the revealed and the concealed, the spoken and the unspoken that is Los Alamos, and thus spent my youth, in which time one is also peculiarly perceptive and shortsighted, in this social atmosphere which is characterized by, among other things, science, malevolent portent and secrecy. Even though I traveled, and I had even lived in California (San Luis Obispo), and Texas (Granbury-Glen Rose), where my father had been an engineer on the construction of nuclear power plants and my mother was a hospital nurse in intensive care and emergency medicine, I spent the years of elementary school, middle school, and high school in Los Alamos and my early view of the social world was largely shaped there. When I was seventeen I was fortunate to receive a scholarship from the U.S. Senate and the Japanese Diet to be an exchange student in Japan. During that time I visited Hiroshima with my host family the Onodas and it was an intensely powerful and life-altering experience. I had grown up accustomed to the LANL (Los Alamos National Laboratory) Bradbury Science Museum and Los Alamos Historical Museum of my youth. The Bradbury Museum for years had for its main exhibit a section called 'Weapons'

which was marked by a red-neon sign of foot tall letters. The Bradbury Museum presented the history of the Bomb as a history of technical genius under wartime duress. When I went to the Peace Museum in Hiroshima I felt like the rest of the history was filled in, and that the part of the history depicted there, the inhuman cruelty of the bomb in terms of its structural and bodily effects, was somehow more primary and more urgent than the history I had grown up with. The photos of the leveled city, the remnants of twisted buildings, the slabs of marble into which human images were burned, the photos of the truly brutal injuries inflicted by the bomb, and the specimens of keloid scars and cancers which were on display there showed other human and social realms of the bomb story that I suddenly realized were routinely avoided in Los Alamos.

After the experience in Hiroshima it was difficult for me to see the bomb as mere implement or as purely and simply the outcome of personal genius when it was so directly tied to mass murder and to devastating environmental, health, and social effects. Of course there is sometimes talk in Los Alamos about Hiroshima and Nagasaki, but the responses tend to center around revenge or necessity (Pearl Harbor and the 'million lives saved by the bomb's use'). Even if revenge and the exigency of combat are said to be 'the hard facts of life,' the harder and more terrifying questions about Hiroshima and Nagasaki don't come up so much in Los Alamos—the questions pertaining to the real and lived effects of the weapons, and the enterprise of producing more and more of them.⁴ Of

⁴ Of course this is only partly true, the infamous book *The Effects of Nuclear Weapons* and other documents well-known to the weapons scientists make extensive use of data collected in Hiroshima and Nagasaki to present their information about structural and bodily damage from atomic bombs.

course the ready answer is at hand that the only way to guarantee that these weapons are not used is to prepare them. While this is a tantalizing thought (it allows one to valorize the technical sophistication and power of the bomb), the gnawing impression is that it is problematic in that the production of more and more bombs and the development of knowledge about them only seems to create and to continually augment the danger of their use.

Even if my perspective on it began to change, I have remained fascinated by my hometown throughout my undergraduate and graduate studies, and I have spent years studying different aspects of it including its society and history. In college I studied Science, Technology, and International Affairs and much of this dealt with the history of Los Alamos and the currents it was tied into. During the summers when I was in college, I would work at the Laboratory in Los Alamos to save up money to pay for school, and I then got my first inside experiences at 'the Lab' that I had always heard people talk about so much. During my first summer working there, I worked for the father of two friends of mine from growing up in the Personnel Security Group of the Operational Security Division.⁵ In that group in addition to checking people's backgrounds for security clearances, we also prepared the paperwork and did the checking up on foreign visitors to the Laboratory. We had a color-coded list of the countries of the world, and we had to classify the visitors based on whether they were from a 'Red' Communist country (also assumed to be those most antithetical to the national

⁵ Ever since the Manhattan Project, Los Alamos Laboratory has been organized into Divisions (such as Physics, Theoretical, or Explosives) under which there are Groups which deal with specific instantiations of the Division mission (such as Condensed Matter and Thermal Physics or Theoretical Biology and Theoretical Physics).

security of the United States and most likely to pursue our nuclear secrets), an 'Orange' risky country like India or Pakistan that was not Communist but likely to be after our nuclear secrets (never mind that the United States had often provided key nuclear technology to these countries in the first place), or a 'Yellow' trusted country like Britain or Canada who were seen as strategic allies and not much likely to steal secrets. This process of checking and clearing foreign visitors was something that would come to the fore in the Lee Affair, with concerns about Lee conferring with visiting Chinese scientists and trying to hire Chinese graduate students, and the foreign visitor check has remained a prominent theme in discussions of Laboratory security since then. During my second summer working at the Laboratory I had been investigated by the Office of Personnel Management and the FBI (all of my old addresses were checked and several of my neighbors and friends and associates were talked to) and I had been granted a 'Q' Clearance, which is the Department of Energy's top security clearance that is especially keyed toward access to the Department's 'Secret: Restricted Data' which covers all aspects of nuclear weapon design and testing and production.⁶ With this new blue badge, I went to work in the Classification Group of Operational Security.⁷ Here things really got interesting and I got more of a glimpse into the central workings and history of the Laboratory. Since 'OS-10,' as the Classification Group was called, was

⁶ It should be noted that, as this was before Clinton had come to office and signed executive orders to ban the use of sexual orientation as a security standard (which was spottily enforced afterwards in any event), my investigation was drawn out and made more complicated when my first year college roommate told the agents that I was gay. They widened their net and talked to ever more friends and acquaintances of mine, asking if I was indeed gay, and a great deal about my social life in general.

⁷ The blue 'Cleared' badge replaced my original red 'Uncleared' badge.

responsible for establishing and validating and reviewing the classification status of all the classified material at Los Alamos, this meant that our group had to have access to all of that material. The level of classification of codes and documents, and the proper handling of that information, was again central to the Lee case.

On my first day on the job in classification, they thought that I should familiarize myself with the work and prepare, so they gave me a full security rundown of the office, including secure telephone and safes, then they produced from the safes several fat 3-ring binders which contained the technical drawings and specifications for all the nuclear weapons in the U.S. arsenal. I was able to peruse these books marked 'Secret: Restricted Data' for hours. During my time there we went to an old vault to look over the schematics for the original few atom bombs and decide if they were still to be classified. We spent some time looking at them then decided that they were still to be restricted. I also had the occasion to attend CIA and DIA briefings and to discuss black projects carried out at the Laboratory. I was also frequently called upon to do research or to look up documents in the Classified section of the J. Robert Oppenheimer Study Center at the Lab. Seeing these old documents, many of which had been prepared by Oppenheimer or Enrico Fermi or Hans Bethe, was a fascinating window into the history of the place. Among the documents I had the chance to see was the original draft of the calculations carried out by Fermi and I.I. Rabi to try to determine whether, in fact, the first nuclear detonation on July 16th, 1945, would ignite the atmosphere of the earth and destroy all life. They concluded that the temperature required to do so was considerably higher than that

generated by the bomb they had designed. The following school year I was working at the Brookings Institution as a student research assistant on proliferation of weapons of mass destruction for a Research Fellow who was named to the National Security Council by President Clinton when he took office. I certainly felt like I was in the thick of the business of security then.

The following summer, my last to work at the Laboratory, I worked in the old N division which designed gadgets for the detection and measurement of different types of radiation, and which often worked closely with the International Atomic Energy Agency, where my father had also worked for a time when I was in elementary school. My boss there was a kind and compassionate physicist, the husband to my old boss in Classification, who had been one of the first to seize on the peace dividend and form close friendships and partnerships with ex-Soviet scientists. He worked on the lab to lab exchanges, some of which my mother would later go on bringing medical equipment, and was early aware of the danger posed by the loss of special nuclear material or nuclear knowledge from the old Soviet laboratories. He acted to help the Russians in their secure containment of plutonium pits and other crucial materials in a facility designed and built for the purpose. He also helped to bring food and some wages to the old research towns so that desperate scientists wouldn't be tempted to sell their experience. Working for him was fascinating and it was extraordinary to see the antagonistic Cold War stance of the mutual weapons establishments change into a mood of camaraderie and cooperation.

By this time, when I was 21 years old and working in 'security' and studying it at school, I was also increasingly left with the feeling that much of this work and study did not contribute to the furthering of world security or safety in a robust sense. While I certainly was convinced of the real evil of the spread of nuclear and biological and chemical weapons, the problematic stance of trying to monitor, denounce, and prevent proliferation in other countries while saying nothing about or even actively justifying the U.S. programs seemed more and more to be an untenable pursuit. And, much as I found some of my work at Los Alamos interesting, I was increasingly disconcerted by the impression that it did not raise the most important questions pertaining to the history and ethics of the place. And, to be fair, maybe Los Alamos as a *scientific* institution cannot be expected to answer these kinds of questions inasmuch as they are historical and sociological ones. I was lucky at this time to have the influence and intercession of two professors who contributed to my taking a more critical and reflective path vis-à-vis these problems: Suzanna Danuta Walters and Babette E. Babich. Suzanna, an alumna of the CUNY Graduate Center, gave me my first introduction to what sociology is and, more importantly, what it could be while Babette, visiting at the time from Fordham in New York, indicated the importance of a critical philosophy and history of science in her lectures on Nietzsche. Both of them encouraged my conviction that the most important questions about Los Alamos were not those that one could reckon by working there, or through usual studies of statecraft and international relations. They both also encouraged me to attack my old convictions that such work and such studies were in some way

just and right—and they introduced me to academics as a realm of thought and action which is an alternative to working in the science and policy of security. In short they encouraged me to ask about the social-historical and *life* consequences of the nuclear age.⁸

Not long after, I took Suzanna's advice about CUNY and enrolled at the Graduate Center. Throughout my time there since 1994 I have been studying sociology, philosophy, and history of science and technology and I have been conducting research about Los Alamos and the nuclear age. I have frequently and regularly returned to Los Alamos for stints of ethnographic research and to note the ongoing changes in the town and Laboratory. In addition to my former participant observation of the work at the Lab, I have spent time with a number of community groups, both formal and informal, to try to get more and more lines and shadow in this sketch of the place. I have interviewed hundreds of scientists, as well as hundreds more people from (or once from) the town who either work in support at the laboratory or who make up other parts of the society of Los Alamos (bus drivers, shop keepers, teenagers, retirees, local entrepreneurs, school teachers, and the like). I have also conducted extensive historical-archival work about the town and about the Manhattan Project and its historical consequences. When the Lee case took off in 1999, I worked to support Wen Ho, since the whole situation smacked of duplicity and political expediency and I feared for his life. I organized on his behalf with the help of many other people in New York who were incensed and concerned by his

⁸ Political theorist Mark Warren was also heavily influential to me during that time, and his seminar on democratic theory served as a valuable place to consider and debate the appropriate role of nuclear weapons within a democratic society.

treatment. The case became a major issue in Chinese American and Asian American politics, and groups like the Committee of 100, the Organization of Chinese Americans, 80-20, and the Committee Against Anti-Asian Violence became heavily involved in the unfolding case. Lee's treatment also publicized the extent and severity of racial profiling in both law enforcement practice and in public suspicion, so we also organized with groups like Mumia-watch, the NAACP, the Asian American Legal Defense and Education Foundation, and the Coalition Against Racial and Ethnic Scapegoating which was formed at this time. Friends with both the Lee family and also other supporters of theirs, such as Cecilia Chang (a Taiwanese American long time friend of the Lees' who had lived for years in Albuquerque), I became the coordinator for the eastern United States for the Wen Ho Lee Defense Fund and Justice for Wen Ho Lee. I followed all the news reports and goings-on of the case, was frequently in contact with the Lee family and with Cecilia Chang, attended a number of the federal hearings in Albuquerque, and corresponded and coordinated with many people from around the country and the world who were concerned and angered by the case. We worked to change the media tenor of the case, which was initially very damning of Lee and was patently racist, but reactions from either big media outlets or even smaller, explicitly critical ones was slow to come. As the case wore on, some journalists, such as Vernon Loeb of the *Washington Post* and Robert Scheer from the *Los Angeles Times*, became much more critical of the government's case and seemed to be well aware of the kind of scapegoating and frame-up that was going on.

A third major component of the sentiment in favor of Lee was scientists, both those working within government weapons laboratories and those working in universities or industry. Many feared for the precedent being set of being placed in real danger on the basis of one's work—they didn't want to be subject to undue harassment and prosecution merely because they worked in a scientific field deemed crucial to U.S. state power. Immigrant scientists worried that they, too, could find themselves facing espionage charges even after working hard to become part of U.S. society and the U.S. scientific establishment. Government scientists thought Lee's treatment to be Draconian and a slap in the face, while Chinese and Asian American science and engineering organizations challenged the new wave of distrust and racism sweeping many sectors of scientific work in this country.

Eventually, Wen Ho Lee was released from prison and from solitary confinement in September, 2000, after some significant changes in the legal and public perception of his case. While his release was of course a tremendous relief for him, family, and friends, the legacy of the case is far from settled. Even though the government was embarrassed in court by the coming to light of several gaffes—including lying testimony by FBI agents and exaggeration of the classification level of the information at hand—and Lee was given an extraordinary and unprecedented apology from the judge who had overseen his case, the fact that Lee took a plea bargain to one count and time served meant that government officials, like Janet Reno and Louis Freeh, not to mention scores of pundits and journalists, would continually refer to him as guilty and as a threat

to the nation. Never mind that the plea deal probably protected the government even more than Lee since it shielded them from being forced to divulge evidence of racial profiling in their investigative techniques, uncharitable commentators continue to paint Lee as nefarious and as guilty. Since his release I have spoken with Dr. Lee a number of times about his case, his incarceration, and his life. I have also talked to members of his family about the ordeal and the aftermath, and I am now an archivist for Lee and family as regards this event.

Much work remains to be done in writing the history of the case, and so far there has been virtually no attention to the social-political aspects of it. Many of the 'facts of the case' and the roles played by different actors are still indeterminate, inasmuch as the false testimony of the case was never fully swept away and the actions of different players has been emphasized or deemphasized according to their desires to avoid embarrassment or claim credit.⁹ Thus there is a good distance to go before any definitive history of the affair emerges, and the work to produce it will require sifting through court records and the documents

⁹ For instance, a prevailing misconception is that Wen Ho Lee 'failed' a polygraph test, which seems to both buttress credibility claims for polygraphy (now roundly discredited by the National Academy of Sciences) and prove his guilt and nefariousness. In fact, Lee never failed any polygraph test. While he did pass with flying colors and 'among the highest scores [one veteran examiner] had ever seen,' it is true that the FBI, dissatisfied with the results, sent them to headquarters for a 'reinterpretation' (political more than scientific) which strangely returned the conclusion that Lee had failed the test. Major players in the case like former Energy Secretary (now New Mexico Governor) Bill Richardson and former LANL Director John Browne played avid roles in denouncing Lee, even while maintaining that there was no racial profiling. Both have since sought to vilify Lee ('he is guilty, after all') and portray their role in the debacle as minimal. Notra Trulock, former head of Intelligence and Counterintelligence at the Department of Energy, and often said to be both a major proponent of racial profiling in espionage investigations and the very one who hastily fingered Lee, has gone to great lengths to exonerate himself and to portray himself as a hero who pointed out serious security problems but was punished for it.

and interchanges of and between various federal agencies who were involved. Since patently false and alarmist testimony was given and classified material is involved, it is notably difficult to present an accurate and comprehensive picture of the unfolding case, and doing so will require meticulous historical research and a Herculean task of cross-referencing and Freedom of Information Act seeking of crucial information.¹⁰ Although I have been deeply immersed in the unfolding and the presentation of the case, and I remain at work on it, this study does not give the kind of ultimate historical interpretation of the Wen Ho Lee Affair that is merited. Such a study will necessarily be several hundred pages longer than this one and will entail the kind of research mentioned above.

While not presenting the definitive historical account, this study does strive to analyze the Wen Ho Lee Affair in sociological and historical senses. It is motivated by a deep conviction that the case simply cannot be understood without a thorough understanding of the society of Los Alamos (both in and out of the Laboratory) and without a grasp of Wen Ho Lee's social life, person, and

¹⁰ The existing literature falls short of this goal. The vast majority of information and background on the case exists in news articles, government documents (like the Cox Report, the Bellows Report, and the President's Foreign Intelligence Advisory Board Report), and court documents. Of the three books now out, Wen Ho Lee's book (with Helen Zia) *My Country versus Me* is a personal account of Lee's life and of the circumstances and experience of the case—it is not intended to be an exhaustive history of the case. The book *A Convenient Spy* by Dan Stober and Ian Hoffman, two journalists who covered the case and the 'security beat' including Los Alamos, is primarily a digest of news reports of the case, with some interviews, but it is subject to serious factual flaws and omissions in research and writing (see further comment on this book in the section on 'Between Science, Race, and National Security'). Notra Trulock's *Kindred Spirit* is also primarily a personal account of his life in intelligence and his role in the investigation of the Lee case and Chinese espionage more broadly. In it he is at pains to defend his actions even while advancing a right-wing interpretation of national security and intelligence (for instance, the claim that Clinton decimated intelligence and security capabilities and that the Department of Energy was run by 'antinuclear activists' during his presidency).

character (Lee as social person rather than as bureaucratic figure). And, while at first glance Wen Ho Lee's status as immigrant American is the very crux of the case and the basis of the mislaid suspicion of him, the elements of immigration, race, and national security (both the bureaucracy which works in its name and the government-media-policy discourse which constantly evokes it and figures it) have not received any very thoroughgoing study and analysis. This seems to be a particularly troubling omission given the stature of the case and the degree to which it resembles other cases and other crises which have turned on the axis of security and ethnicity. Thus, this first stab at the topic tries to place it in a social and historical context which emphasizes the place and history of Los Alamos, on the one hand, and the nexus of immigration, race, nationalism and national security, on the other hand.

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Chapter 1

Sociological Introduction and Main Premises

The Wen Ho Lee case involves touchstone sociological issues like immigration and ethnicity, the state ownership of secrets of military and technological force, and the definition and policies of national security. Given the international currents of the post Cold War 1990s and Lee's position at Los Alamos National Laboratory, he became the classic scapegoat in a process in which elements of the Cold War security apparatus in this country were seeking to define the international threat picture and the possible rivals to U.S. power. As a perennial domestic dispute about foreign policy toward China raged on, and Clinton was pursuing a trade-based relationship with the People's Republic of China, a number of policy actors and agencies portrayed China as a hardline communist state and active military threat to the United States. The tenor of these claims increased from concerns about Chinese launching of European and American satellites, to allegations about PRC and People's Liberation Army contributions to U.S. political campaigns (although now curiously there is little interest in investigating the campaign contributions and connections of the purported double-agent Katrina Leung, who was a major Republican Party fundraiser and donor in California), to intelligence and security warnings about Chinese espionage, to outlandish claims at the root of the Lee case that the PRC had stolen a wide variety of technological knowledge from the U.S. (which would supposedly allow them to fulfill their longtime goal of military modernization and thus become a major superpower threat to the United States), to the claim that it

was Lee, a Taiwanese-born, U.S.-naturalized citizen who had worked for the U.S. government for more than twenty years, who was singlehandedly responsible for divulging a number of key nuclear secrets to the PRC, including the design codes and knowledge for the compact and powerful W-88 warhead.

The case did not arise in a vacuum, but rather in the society of Los Alamos and northern New Mexico against which this controversy came to light. In order properly to scrutinize this case, it must be seen in the context of the history of Los Alamos and New Mexico, and in relation to the bureaucracies of national security which developed during and after World War II in the United States. At the same time, both of these histories are also intimately related to the process of national self-definition in the United States and the general portrayals of loyalty and threat to this nation. Lee's story is one about ethnicity and perceived loyalty, but it is also about the ways in which sources of international threat are identified in the United States and the way that this process of designating external threats always entails the suspicion of internal enemies.

The triple colonial legacy of New Mexico--Spanish, American, nuclear--is an integral part of the definition of both nation and security in this country and of the social process by which security is pursued. If an effort is made to understand Wen Ho Lee's status and belonging within U.S. society in general and the weapons infrastructure of the government in particular, then it is absolutely necessary to inquire into the definition of the United States as a nation, and the story of ethnicity and autochthony which is generated alongside it. At issue is what groups and what cultures are seen to be truly native and home-grown in the

United States in relation to those groups and cultures which are instead seen as *always* foreign and exotic and never really fully *at home* here. The laboratory in Los Alamos, the community of Los Alamos, and the wider society of northern New Mexico are not just general backgrounds from which this tale of race and nationality takes shape (as if such a background existed!), but places where a longstanding history of colonialism and interaction between a number of ethnic groups makes for a complex multiculturalism in which the ongoing definition of U.S. nation and U.S. society is at issue. The three phases of colonialism and the Indian history from before the first Spanish explorers arrived here all involved significant immigration and internal migration in the area. Wen Ho Lee's immigration to the state can be seen within this history of migration and ethnic interaction here, and looking at his story this way historically highlights the ongoing process of ethnic identification and trust within U.S. nationalism. Much of the attention and writing devoted to the Lee case has been centered on the presence of external threats which supposedly beset this nation, but sociologically the treatment of Wen Ho Lee has more to say about the status of U.S. society in regards to ethnic self-image and acceptance than it does about military threat from abroad.

A major part of Lee's story is that he worked directly on some of the most closely held secrets of the U.S. war state: information concerning the design of nuclear weapons. In a sense this area of research is the most guarded of national secrets, since all nuclear weapon information, whether it be about design, production, or employment, is said to be 'born classified' in the

bureaucratic systems for classifying U.S. secrets.¹¹ This means that any knowledge or information of this type is automatically classified, likely as Secret Restricted Data or Formerly Restricted Data, as soon as it is produced. It is the only type of knowledge to have this level of shrouding. Other national security information, including the identities of spies and plans and histories about covert operations, are not 'born classified' in the same way, but must be reviewed by a classification officer and 'classified' as protected. As we see from ongoing concern and discussion about weapons of mass destruction, the knowledge of their production is a signet issue for U.S. national policy and national power. Nuclear weapons were the ultimate expression of power during the Cold War between the Soviet Union and the United States, and it is clear that maintaining massive nuclear advantage makes up a main element of post Cold War U.S. policy. The U.S. has acted to retain significant nuclear forces while pressuring select other nations to forego or reduce their forces. The 1998 statements of concern and censure by the U.S. toward India and Pakistan, and recent hysteria about Iraq, Iran and North Korea clearly show that U.S. politicians and diplomats favor an end to new proliferation and a curtailment of existing deployments in non-western nations, while the arsenals of the U.S., Britain, and France are treated as proper to those nations. Witness the recent enthusiastic approval by Britain and the United States of Libya's announcement of abandoning all

¹¹ The 1945 Smyth Report on the wartime Manhattan Project was accompanied by an announcement that said that "the best interests of the United States require the utmost co-operation by all concerned in keeping secret now and for all time in the future, all scientific and technical information not given in this report or other official releases of information by the War Department," in Groves, p. 351.

weapons of mass destruction and associated research.¹² Other nations, like Israel and at times even Pakistan and Iraq, benefit from direct support of their nuclear programs by the United States. The U.S. has pushed ahead on major programs for Strategic Missile Defense, and the new security climate after September the 11th, 2001, has led to myriad discussions of new nuclear weapon design and testing by the United States. In May 2003 the Executive Branch announced both the resumption of the production of existing nuclear weapons designs (starting with the plutonium fission primaries at Los Alamos' TA-55 Plutonium Facility), and the pushing ahead of designs for new types of warheads and weapons systems, including the fabled Robust Earth Penetrating Warhead.¹³

The state apparatus and the economy of weapons design, experimentation, and production are the crucial elements of U.S. empire. Nuclear weapons were the crucial element of U.S. dominance after World War II, and perspicacious historians now agree that their use at the end of the war had to do with testing them 'in the field' and intimidating the Soviet Union rather than with the swift concluding of a war against an enemy that was already defeated and had offered surrender.¹⁴ The self-conscious awareness of U.S. power, predicated on nuclear

¹² BBC television coverage of the announcement heralded it as a major event with a wide red banner on the screen flashing 'BREAKING NEWS-LIBYA WMD,' and included footage of both Tony Blair and George Bush welcoming the news with offers of economic rewards to Libya.

¹³ Although securing the astronomical funding for these programs in Congress has proven controversial.

¹⁴ See Gar Alperovitz, *The Decision to Use the Atomic Bomb* and several books and articles by Robert Jay Lifton and Greg Mitchell, among a number of others who have been making this case. Stewart L. Udall, Secretary of Interior under Kennedy and Johnson, also holds to this interpretation in his *The Myths of August*.

force, immediately began to affect U.S. society and U.S. policy after the war.¹⁵ Even at the time there was a strong current of advocacy for U.S. unipolarity and a precursor of the now-popular ‘full-spectrum dominance.’ Thus the Soviet nuclear test of 1949 came as quite a shock in the United States, and was taken up by media and politicians to garner support for pushing ahead with the nuclear program, including development of the hydrogen ‘super’ bomb. As the *New York Times* put it, “We are prepared for the event intellectually but not emotionally.” At root of the affront felt by the Americans was the notion that the technology and the knowledge about the Bomb could be owned—and indeed that it was rightly owned by the United States and, begrudgingly, Britain who had jointly undertaken the Manhattan Project with the U.S. This scientific and informational conundrum is at the center of all history of nuclear weapons: the tension between an open scientific worldview which advocates the free dissemination of information in international cooperation, and the closed nationalist worldview which advocates state control of strategic information and which hews to the realist and Machiavellian principles of unending international conflict.¹⁶

In addition to the history of colonialism and the changes in U.S. state power after World War II, several sociological currents are invaluable in this study of

¹⁵ For an excellent portrayal of the immediate effects on American society, see Paul Boyer, *By the Bombs Early Light: American Thought and Culture in the Nuclear Age*.

¹⁶ There is, of course, another stage of this controversy now as not just *national* but *private business* entities claim ownership of scientific knowledge and technical procedures in order to seek a return on investment. It is this development which started putting pressure on LANL and other DOE laboratories to form ‘Cooperative Research and Development Agreements’ to capitalize on government science and to bolster U.S. research. Patents and private ownership of inventions and research can lead to secrecy and control of information every bit as exclusive as that exercised by the national security bureaucracies.

ethnicity, enmity, and security. To begin with Georg Simmel's work on the social figure of The Stranger, both accepted within and ostracized from society, is useful for thinking about the status of Wen Ho Lee and the way that he was positioned as a scapegoat. Further, Simmel's extensive considerations about secrecy and secret societies are eminently apropos of the domains of national security which are so central to Lee's case.¹⁷

Max Weber's considerations about bureaucracies are useful in looking at the vast institutions of national security and the way that they operate to define and continue their missions. Above all they are not just reading and responding to situations, but interpreting and defining them as a part of the process of their work. It is now common knowledge that during the Cold War the Central intelligence Agency, the National Security Agency, and the Defense Department would routinely and consciously overestimate the level of Soviet force strength in reports to the Congress and the Executive Branch, which had the direct result of ensuring large ongoing budgetary approvals for these organizations charged with countering the Soviet threat. As a part of the social psychology of bureaucratic life, it is necessary to consider the figure of the professionally or institutionally paranoid members of the security state who are charged with discerning and responding to threats to the United States. Like Nietzsche's nihilist, they would rather *will nothing* than *not will*. Thus their job is cast as finding the myriad threats (automatically assumed to exist) rather than perhaps admitting that such

¹⁷ While Simmel begins by considering only those organizations of which membership and participation is secret, he quickly passes over to considering other situations, like Los Alamos, where membership in the group is not necessarily secret, but where the organization itself holds a body of secret knowledge and where would-be members must pass muster as being qualified to know and to protect it.

major strategic threats may not exist *per se*, or that they exist in a much-diluted form. As with George Bush, who in many ways operates on this principle to the extreme, they know that there are 'bad guys' out there, 'it is just a matter of finding out who and where *they* are.' Of course there is a crucial gloss routinely made in news and diplomatic analysis. These professionally paranoid actors are of course acting by and large in favor of U.S. interests and U.S. power, even though they are presented purely and simply to be guarding the well-being of Americans at large. The bureaucratic operation of the security state, and the outcomes and effects of this operation, are ripe for sociological scrutiny as organizations wielding and affecting tremendous power.

Thirdly, Emile Durkheim's path breaking analysis of the social function of deviance in terms of defining society and setting perceived social limits can be used for study of this case. Looking at Lee's case, and a number of others like it, sociologically shows that these crises and their policy aftermath have much to do with anxieties in domestic society and attempts to define and fix the groups which are seen to belong to it. Thus the Lee case is first and foremost about the status of Chinese and Taiwanese Americans and the degree to which they are accepted into the mainstream institutions of U.S. power and granted the capacity to be seen as autochthonous members of U.S. society. Of course many of these dynamics are seemingly ethereal and attitudinal, but their tangibility and their reality in everyday institutional and community life is nonetheless very concrete. Thus it seems germane to look at crises like this in terms of their social function

of expressing uncertainty about social cohesion and attempting to secure its representational bounds.

Main premises of the study:

1. Sociological study can contribute to the study of international affairs. This case makes clear that studies of international relations and international law must be reflexive, even as it also underscores the fact that usually these areas of inquiry are analytically separated off from the consideration of so-called domestic politics. A political sociological frame of reference studying ethnicity and nation-formation treats 'domestic' and 'international' issues as intimately tied to one another (the same thing) or in a dialectical relation. Thus this perspective serves to avoid the considerable pitfalls of attempting to study these arenas in isolation. We have already had reason to see that the definition of external enemies immediately refracts on domestic populations seen to be related to these enemies. Furthermore, any number of strong examples serve to point out that the usually bellicose stance of international relations as a discipline, especially in the United States, is both analytically incomplete and would be significantly tempered by more reflexive analyses of international events. Consider the Chinese nuclear proliferation of 1964. This is usually read unambiguously as an indication of Chinese aggression and irredentism, as proof that in fact they are an evil empire. According to this line China (taken as a whole unit) decided to develop nuclear weapons purely out of evil intentions, most likely against the

United States and U.S. interests. A more careful analysis and history of the event casts it somewhat otherwise, and more uncomfortably implicates the U.S. in the process. At the time of the Chinese proliferation and nuclear test, the United States had recently fought a war in Korea, against Chinese troops, for the avowed purpose of containing or defeating Communism. During the Korean War, a number of U.S. politicians and generals called for the nuclear attack of mainland China. And of course the Cuban Missile Crisis had just transpired and reinforced the message that the Soviet Union and the U.S. were reckoning their influence and their power directly through nuclear weapons. Thus it seems that the PRC had a very direct defensive motivation to develop nuclear weapons technology. This motivation is all the more understandable in light of continued U.S. involvement at the time in Southeast Asia to try to undermine Communism or advance U.S. interests.

Furthermore, U.S. denunciations of India and Pakistan over supposedly inevitable nuclear war after their 1998 nuclear tests were shrill and peremptory indeed, especially considering that: a) India had tested previously (in 1974) and had a known nuclear capability, b) the U.S. itself had offered early help and materials to the Pakistani program and the Indian program, and c) India, which has fought three wars with China, clearly has defensive motivation to see the PRC as a military threat (and a nuclear-armed threat no less due, in turn, to Chinese fear of U.S. actions and capabilities). It is certainly not my purpose here to validate any nuclear proliferation (including especially that of the United States) or to buttress the tired and offensive *realpolitik* principles of modern,

imperial international relations. Much rather, I'd like to point out that these chains of fear and of distrust are long and delicate indeed, and they must be discerned and treated with care if we wish to have hopes of defusing this deadly situation. Little is served by arrogant U.S. diplomacy and scholarship which fails to take account of the way that U.S. policies and actions very directly create fear and instability in other peoples and other nations.

A final note regarding international relations is due. Although this discipline purports to be the study of world affairs and world relations, its guiding assumptions and the preponderance of its attention bear on military force, first and foremost, and international trade and business, secondarily. Much needed work can be done to shift the frame of reference in international relations towards a truly internationalist conception which is concerned with cultures and peoples around the globe in terms of their cooperation and common interests rather than their nationalism and military aggression.

2. The United States is a nation of immigration. The history of the United States is the history of immigration and its effects. Colonialism and the settlement and securing of the lands of the Americas invaded the cultures and peoples who lived here before, and resulted in genocide against the Native American Indians. There has been killing, enslavement, displacement and Christian conversion of the Native American Indian population--most likely over 100 million Indians were killed in and through colonization--but still there remains a significant presence of these people throughout the U.S. and their influence on many aspects of

American life has been deep.¹⁸ European colonization by the Spanish, the Dutch, the English the French, and the Portuguese brought an influx of peoples from the European nations. With the brutal practice of slavery developing along with the pursuit of Empire, millions of people from Central and South Africa were brought to the Americas as slaves. Another genocide was carried out here or on the way here as untold millions died in this period of slavery and the slave trade. Over three million probably died during the passage alone, and millions more from murder and mistreatment in Africa and the Americas. With the influx of African and European peoples into the New World, many regions developed unique mestizo cultures with a syncretic blending of the beliefs and practices of different groups of people. At the same time, as trade and travel, forced or otherwise, developed between truly global empires of the European nations, thousands then millions of Asians came to the Americas.

With this historical background and the millions of people who have immigrated from around the world in the last few centuries, the United States is markedly a nation of immigration where many of the dominant representations and norms and bounds of the society are subject to change over time according to the presence of different ethnicities and cultures. Also the constitution and self-image of the nation are continually changing in this manner. The cultural groups and the ethnic composition of U.S. society are always evolving in a process of defining what the U.S. nation is. Simply put, since the U.S. is a

¹⁸ See Russell Thornton, *American Indian Holocaust and Survival: A Population History since 1492*, Norman, University of Oklahoma Press, 1987; Carl O. Sauer, *Sixteenth Century North America*, Berkeley, University of California Press, 1971; and Ward Churchill, *A Little Matter of Genocide: Holocaust and Denial in the Americas 1492 to the Present*, San Francisco, City Lights Books, 1997.

country of immigration, the definition of the nation itself is a notably slippery process. There is not the same ability as there might be elsewhere to claim some kind of ancient and first habitation on the land. Indeed such a claim would be validly made by the Indian cultures that preceded the European colonization, and support their claims for return of land stolen from them. No, claims to nation-definition and nationhood are much more contingent for the United States. While of course, especially in the northeast and the southeast, there is a historically strong and influential white Anglo Saxon Protestant class, the nation is composed of such a plurality of ethnicities and religions that the image in no way covers the intricacy of Americanness altogether. No, a number of other immigration flows and histories complicate the Anglo Saxon view of America. And, indeed, even the Northern European presence in America is the result of complicated migration and politics, so the nation has a brief but intense historical frame of reference and an element of international anomie.

As it is very difficult to speak of any 'American' whose history doesn't immediately involve immigration and the effects of migration, it is difficult to speak of Americans at all without thinking of them as immigrants or internal migrants of one kind or another. As a country so affected by colonialism, the issues of nationalism and what the nation itself is are open, historical, and complex questions. As a nation-state which, like its earlier European models, seeks stability and the control and security of its territory and population, the United States is nonetheless and has been since its inception affected by flows of people, religion and culture which defy a homogenous and uniform society or

citizenry. When it comes to national loyalty and trust, in terms of who is really treated as autochthonous in and loyal to the nation, social boundaries as to who is American and who belongs are put to the test and articulated.

3. Crises of national security and loyalty always involve ethnicity and social cohesion. Inasmuch as the definition and delineation of nation is an ongoing and historical process in any case, and inasmuch as the case of the United States and New Mexico is a particularly recent and complex process, the question of loyalty to the nation presupposes the separation from those who belong of those who don't. The specification of the in-group and the out-group, of who is 'local' and who is 'stranger,' must be accomplished in order to make judgments about who is loyal and who is not. Several historical examples show that tensions about national belonging and autochthony are immediately connected to questions of security and treason. Indeed for Wen Ho Lee the issue was presented as the ability to trust him in his loyalty to the United States—did we believe that he was an honest American immigrant who had joined the dream, or that he was a well-trained and cynical mole who had been going through the motions for so long to glean privileged information for the benefit of another society and nation? In the end little more was provided than his Chinese-ness, his name and his look and his native language, as the grounds for suspicion of him.

Study of the Rosenberg case in the early 1950s demonstrates that Jewish ethnicity was a major element of the case and the controversy around them. At

issue was whether Julius and Ethel Rosenberg were accepted as loyal Americans or whether they maintained allegiance to a foreign nation, in this case the Soviet Union. Of course there were many Russian Jewish immigrants to the United States, and of course there were many Jewish Americans in the United States' Communist Party, but the height of paranoia of the Rosenberg era held that Jews as an ethnic group were of questionable loyalty and of stranger status in U.S. society. In the 1950s the specter painted of the evil communist Soviet Union led to a disproportionate singling out of Jewish Americans as possible spies and agents for the U.S.S.R. In a similar vein, antagonism and violence against Paul Robeson which was ostensibly about his Communism played deeply upon U.S. racism and drew in ethnicity as a kind of index of international threat.

World War II had seen the mass rounding up and incarceration of Japanese Americans in concentration camps in the United States. While international threat from the Japanese Empire provided the official motive cause for this action, the policy had the effect of casting all ethnic Japanese in the United States, regardless of family history or employment or personal characteristics, as threats to the U.S. nation. The fear of an external enemy immediately entailed the hasty judgment about the loyalty of a class of Americans. The litmus test which shows that this action was not merely a reaction to external (made internal) threat is that there was no corresponding policy of shakedown and incarceration of German and Italian Americans, even though many of them had arrived more recently than the Japanese Americans and although it was known

that German agents had carried out sabotage within the United States during World War I. The incarceration of the Japanese was a policy about security—but it was about the sentiments of ethnicity and belonging and security in U.S. society.

These days the same dynamics are all-too-evident on a daily basis in the United States, where the identification of a new high-level external threat to the nation in terrorism has resulted in new waves of specifying those domestic citizens and populations who are supposedly tied to this international menace. Muslim Americans, those from North Africa or the Middle East, South Asians, Central Asians and Southeast Asians have all been affected in a clumsy process of trying to fit the definition of terrorism to a perceived ethnic group. The security crisis precipitated by September 11th has drawn on and in turn amplified the lack of understanding about these groups in the United States and the ambiguity about their belonging in U.S. nation. In the effort of the last few years to securitize the nation, once again the process has been primarily and deeply cast in ethnic terms and in terms of social cohesion. Hundreds or thousands of secret deportations were carried out, largely of immigrants from Pakistan or Saudi Arabia. The recently-released Fine Report from Department of Justice Inspector General Glenn Fine adds official imprimatur to what we already knew: thousands of immigrants were held for months in 'unduly harsh' conditions including physical and psychological abuse and without access to attorneys. Indeed for months and months the Department of Justice would not even admit to holding them, much less disclose their locations nor their names. And this is to say

nothing of the other detainees or arrestees held on secret charges, and those who are still being held in a concentration camp at Guantanamo Bay, Cuba, in a move to explicitly distance them from the U.S. mainland and to place them in a kind of stateless limbo. Clearly enough, there is no intention to extend any form of due process or procedural fairness to these unfortunate prisoners who are part of the process of trying to define the ethnicity of the new international threat.

Inasmuch as bids for national security must involve a definition of what and who the nation is, immigration and ethnicity are the central issues of nationhood. Again and again and from any number of societies there are examples of crises in which external threats to national security are minutely articulated in terms of domestic loyalty and the acceptance or not of supposedly-distinct ethnic groups within that society. And, to be sure, each time that a major international enemy is identified in these nationalist processes, members of a society who seem to have ties, especially ethnic ties, to that threat will come under intense scrutiny.

4. National security crises have more to say about the internal composition and the ethnic self-image of society than they do about external threat. These crises are a major part of the process in which society, social cohesion, and social boundaries are shaped in relation to ethnicity. Sociologically it is more profitable to look at these crises as elements of internal social production and articulation of culture, country and nation. If deviance and the definition and treatment of allowed actions are constitutive limitations of society which help to shape it, then it also seems that these crises of security and loyalty, which express and affect

the ethnicized definition of nation and autochthony, are also social processes which play a role in generating social acceptance and social bounds.

And it is not just the international threats to national security which animate this process of casting different ethnicities as dangerous or safe, but wider fears of security and safety within a given society which take up and orchestrate racism and ethnic tension. For African Americans and for Latina Americans, even though there is not the same issue of loyalty to a threatening foreign government, there is a pervasive fear nonetheless that they fit unsteadily within the domestic security of the nation. Incarceration rates, policing practices, and many types of mass media representation all illustrate that there is a strong notion that these populations, or huge elements of them, represent a threat to the internal order and safety of U.S. life.

Ever Since Dreyfus...

The Dreyfus Affair of the 1890s is parallel to the case of Wen Ho Lee in many ways. As a French Jewish officer in the French Army, Captain Dreyfus was at once within the corridors of power of the French State and he was a stranger in French society. He was born and raised and educated in France, but he still was not subject to a complete acceptance, and his story is replete with other army officers and politicians who were suspicious of him as a Jew and who were opposed to the presence of a Jew on the Army General Staff. In a crisis about French national security, in which crucial military secrets were said to have been

lost to Germany, the real firestorm emerged around the issue of Dreyfus' Jewishness, and whether Jews in general were a group that was incompatible with French nation. It was only a few decades later that the Vichy government of France would be fully complicit with the displacement, deportation and the execution of French Jews. Played out in the Dreyfus Affair was clearly a social process of defining the inclusion or the exclusion of Jews. Dreyfus himself shows that there was a significant ambiguity and doubt as to whether Jews could be trusted in the central nodes of power in the French state.

In France, where there is a parallel obsession with national security to that of the United States, along with the presence of a large and active security state, it is domestic security and the problems of ethnicities that animate discussions about safety. This domestic security and the threat which is said to come from North Africans and Central Africans, is the perennial hot-button issue for conservative campaigns in France. The issue of domestic security and public safety was seemingly the main source of the marked rightward shift in the recent French elections. Certainly Chirac is dedicated to the hard-line anti-immigrant and racist security policy of the French right, but it even seemed for a time that Chirac would be overwhelmed in the election of Jean-Marie Le Pen himself, the very personification of the ultranationalist, anti-immigrant, racist, and anti-semitic right. As a sociological process of continuing to define the constituency of the French nation, it is worthwhile noting that the main ethnic groups affected are the Jews, subject of longstanding tension and ambiguity in French society and victims of the Vichy regime, as well as French Africans who are part of the still

very much unresolved French legacy of colonialism. This era of French colonialism ended only very recently in a historical sense (if we may even say that it ended at all given the amount of remaining French military and diplomatic influence in Africa and the South Pacific), with the War of Algeria a somewhat recent affair which, like the Vietnam War in the United States, is only just starting to be evaluated in a truly historical and critical light. It is evident that the legacy and the consequences of French colonialism and the mass movements of populations that it entailed remain very open and profound areas of influence on the construal of French society itself, and the 'proper' constitution of the French nation.

Controversies about the building of mosques, about rates of immigration, and about 'les Africains dans les banlieues' all show the racial tension of French society and the way that ethnicity is used inevitably as a part of the discourse of security and social integrity. On the one hand, this is about the relative acceptance of different groups in French society. On the other hand, as with the issue of Chinese or Muslims in the United States, the question is a somewhat moot one since these populations are such a *de facto* presence. While there is certainly tension about Algerians and Moroccans in France, and there are recriminations about Islam, it must be borne in mind that the number of North Africans who are French citizens amounts to a fifth of the total population of France. So, while the campaigns and the crises about immigration are not as much about whether these people will be wholesale accepted within or rejected from France, they are certainly part of an ongoing process by which French

society is articulating its ethnic self-image and its concept of nation. Of course a few centuries ago, the French notion of nation was predicated upon a tie to the land and a proper Frenchness. As a result of colonialism and population exchange, the very notion of nationality and nationhood has been affected from its central assumptions outward.

If Durkheim, within this French society (but also understanding its ethnic ambiguity as a Jew), could treat crime as an integral part of the way that society comes to terms with and represents itself, even in the way that norms and rules are shaped, then certainly it behooves us to look at security crises and supposed security breaches as parallel instances of the way that society represents itself and serves to try to draw boundaries of an entity which is notably fluid. Crises about security are productive phenomena in which a society dramatically frames the issues of loyalty, belonging and ethnicity. In these prominent events, ancient and persistent racism and xenophobia are made evident even as they are repackaged and reinvigorated. Questions about the supposed integrity of the land or the population immediately become questions about who belongs and who does not. Whether or not someone is trusted in strategic positions within a society based on their ethnicity alone is a strong index of the degree to which members of that ethnic group are tolerated and accepted (of course, if someone is trusted on the basis of their ethnicity alone, then it is likely to be more difficult to perceive, as it would be 'invisible' through seeming normal or uncontroversial). As with Captain Dreyfus and with Wen Ho Lee, if there is a lingering and pointed mistrust based solely on whom they are perceived to be, Jewish or Chinese, then

there is a strong ambiguity about these groups vis-à-vis the larger society, and their cases stand in for a much wider social process which they in turn affect.

Taking the analysis even further, it is often the domestic societal ambiguity and tension itself which gives rise to the fears about external threats and motivates actions against them. The uncertainty about what exactly to do with the Jews, at a time when they lived by the thousands in France or the United States but were limited in terms of access to schools and many jobs, most likely played the key role in generating both the Dreyfus Affair and the case of the Rosenbergs. Presentations of external military threat to the nation became avenues through which ethnicized distrust was expressed as these societies struggled to come to terms with immigration. Just so, the ancient European fear of the 'Yellow Peril' has several times been invoked as an expression of the uneasiness in U.S. society about the assimilation of Chinese Americans. Despite the fact that groups of Chinese immigrants have been in the country for hundreds of years, the tension about Chinese presence in the United States has never abated, and has been subject to a number of cultural and legal expressions. The most prominent of these is the Chinese Exclusions Acts, in which American uneasiness about Chinese Americans resulted in Chinese becoming the only ethnic group ever to be specifically excluded by law from the country. When the Exclusion Acts were instituted in 1892, very nearly the same time that the Dreyfus Affair would transpire in France, and institutions of power and economy were much more dominated by European Americans, the significant racism and distrust of Chinese Americans expressed doubt about the degree to which they fit

and belonged in U.S. society. Once again, as with the French tension about North Africans, the question was somewhat moot inasmuch as segments of the U.S. economy before and during the Exclusion Acts were heavily reliant on Chinese labor. But, in like fashion, they are the outgrowth of a social process of defining nation and loyalty through ethnicity. While this process of course goes on and changes over time, it does not necessarily change at the same rate as the immigration that brings such populations. Thus the situation of the Stranger so well described by Simmel where members of these ethnic groups find themselves curiously within and outside of social processes.

Wen Ho Lee's accusation and treatment also fits within this dynamic inasmuch as, even though the military threat to the United States from China seems to have remained relatively constant over the last few decades, once we clear away the inflammatory claims such as those in the Cox Report, there was an escalating fear of Chinese military espionage in the U.S., especially espionage carried out by Chinese Americans, in the 1990s. Even while the PRC itself did not seem to be fundamentally changing its military posture or becoming more confrontational to the U.S., fears and accusations about Chinese agents in the United States were shooting up. Reports in the 1990s from virtually all the intelligence services of the U.S. government contained stern warnings about Chinese espionage in the nation, and the operating principle was often that this spying was being carried out by ethnic Chinese, regardless of their citizenship. In the Dreyfus Affair what was at issue was a recurring uncertainty about Jews in

France, as in the Wen Ho Lee Affair the issue was Chinese Americans and the way that they fit into U.S. life and the institutions of the state.

Chapter 2

Methodological Prolegomenon

While these concerns are motivated by my study of my hometown of Los Alamos, I hope that they have wider resonance in terms of the dynamics of academically studying a place or situation which is deeply familiar to the researcher. This research is the outgrowth of 13 years of extensive research on Los Alamos and northern New Mexico, 26 years of either inhabitation or study of the region, and 4 years of study of the Wen Ho Lee Affair. The Los Alamos study has included periods of participant observation working at the Los Alamos National Laboratory in both classified and unclassified work (1 year) and living in the town and participating in community events (15 years), as well as more than three hundred interviews with residents of Los Alamos, both scientists and non-scientists, and with residents of communities around northern New Mexico (including both those who have a direct employment or personal tie to Los Alamos and those who do not, as well as activists who have taken on a role of external review and criticism with respect to the work at Los Alamos), and thousands more conversations and informal interviews during the course of living in and studying the place. In addition, this part of the study has drawn upon extensive historical and archival research about Los Alamos and northern New Mexico.

Ever since 1999 I have been closely studying the unfolding of the Wen Ho Lee case through content analysis of all of the news stories and government documents bearing on it, participant observation as part of the campaign

advocating on Wen Ho Lee's behalf (as the Eastern U.S. coordinator for Justice for Wen Ho Lee/the Wen Ho Lee Defense Fund), attendance at Federal Court proceedings in Albuquerque, and extensive interviews with Wen Ho Lee, his immediate and extended family, and many of those who organized on his behalf in New Mexico, New York, California, and Washington, DC.

Some novel methodological considerations are raised by the sociological study of a community by someone who has been decisively formed by that community and calls it 'home.' The usual distance of a 'disinterested' study cannot apply, and yet the researcher must take the place with a certain remove and level of abstraction to be able to study it. At the same time, knowing the place so intimately provides a level of nuance and depth to the knowledge of it that would be extremely difficult for an outside ethnographic researcher or historian to attain. Knowing a place as home also means having a thorough, even unconscious, knowledge of the everyday activity and culture of the place. And is this not the very goal of ethnography—to achieve a thorough understanding of the everyday activity, culture, and language of a place?

This kind of home-study is a deeply empirical and analytical form of research, and it is an instance of rigorous longitudinal participant observation. It is not only or primarily a study of the self or a psychology study, but it involves the self. In addition to the data from personal experiences over time in many social contexts, the researcher can include thousands or hundreds of thousands of conversations about myriad topics and in various settings, just as hundreds of interviews of varying degrees of formality can be brought to bear on the topic. Inhabitation and

ongoing viewing and experience of the place confer familiarity with the topography and architecture there. Air and climate are not only intimately known but form the basis of expectation that the researcher may have toward other places and the climate in general.

Living in a town over time and being enmeshed in its everyday life involves the researcher in its historical unfolding. First, the researcher lives in and through different historical stages there and comes to see their own personal history as intertwined with the town history. Second, the researcher is constantly exposed to the ongoing folk and institutional history of the place itself in the form of storytelling and community events, lectures, and performances. Third, formal study of the history of the town and the place, and the historical dynamics in which they have been involved, expands the timeline and combines with personal experience to give a broad historical perspective on the locale which in turn augments the sociological analysis (inasmuch as it aids in the interpretation of institutional history and personal motivations). Fourth, the researcher actively participates in the historiography of the place in studying it and writing about it.

Destruction and Home

What are the implications, too, when one's home is fundamentally associated with destruction or even evil. This is not a consideration that is unique to Los Alamos. There are many places, such as Auschwitz, the old Willowbrook State School on Staten Island, Rwanda, Hiroshima and Nagasaki, that are part of this

dynamic. Individual homes or neighborhoods can take on this quality in situations of domestic violence, other violent crime, accident, or tragedy. In all these situations, as at Los Alamos, there is a tension in that home, which is usually coded as something that is stable, safe, nurturing, and benevolent is also a place which is tied into violence and atrocity. The question arises: how can such a place be called 'home'? Although shocking violence is widespread in life, occurs across the globe, and may even be claimed as a constant of human or natural history, the social significance of this kind of internal combination of opposing values is often ignored but continues to play a role in individual and cultural malaise. Although these currents of destruction and domesticity are not unique to Los Alamos (although they are of course unique to Los Alamos after its own fashion), the ability here to make use of the case study of the town to further look into their concrete manifestation is valuable.

People living in such places, perhaps especially children living in such places, are presented with a bewildering combination of creative and destructive forces as their context and environment. How does one understand the differences between mass destruction and community life? Are they both valued, and is mass destruction valued in community life?

That these kinds of contradictory valuations confuse many adults as well as children is clear to be seen in the example of nationalism, especially the kind of nationalist patriotism that we have here in the United States. The expression of the love of this 'land of the free and home of the brave' is routinely said to encompass active justification of destruction and torture.

The name of Los Alamos is nearly universally associated with one thing: the atomic bomb. On any number of occasions I have been asked, when people first find out that I am from Los Alamos, if it is that place “where they did all the nuclear testing,” or “that is the home of the atomic bomb.” Sometimes people don’t ask this kind of question but respond with a look or a ‘hmm’ which is just as telling. And of course there is the ubiquitous “well you must glow in the dark, then”? All of these reactions point to the fact that this small and isolated town is well known for one distinct thing that produces foreboding and discomfort. How does this association affect the consciousness of the residents of the town? On the one hand they are constantly subject to reactions like those I have described from outsiders, on the other hand one can hardly forget in the town itself what it is there for and what its history is. It is not the case that the history of World War II is ignored in the town: quite the contrary. Nor is it the case that the power and the history of nuclear weapons is overlooked in Los Alamos—after all, these are the bread and butter of the town and the fact is widely discussed. Yet, it would be equally impossible to say that the history and the implications of World War II and the Cold War are deeply considered there. Such discussion as does take place about them serves to hide as much as it accurately reveals. But, even if many of the thoughts about destruction remain unspoken in Los Alamos, they are there nonetheless. The awareness of the intimate tie to destruction and danger is a factor which affects the consciousness of everyone in the town, regardless of their admissions or talk about it.

There are at least two prongs to the awareness of destruction and danger in Los Alamos. Accompanying the historical and ongoing role of the town in the business of weapons of mass destruction and state security, there is the discomfiting fact of living in proximity to such research and the materials it makes use of. Hence the popular quip that Los Alamosans must glow in the dark or suffer from perennial health problems related to radiation. Clearly, much of the research involved and the materials needed, for instance plutonium, are hazardous indeed. As much effort as goes into the attempt to control and downplay concern about radioactivity in Los Alamos, and there is much effort toward that end, this effort wouldn't be necessary in the first place if there weren't something to be concerned about. Like living near a chemical factory, for example in Bhopal, India, or next to the Nevada Test Site, living in the proximity of such facilities as exist at Los Alamos can hardly fail to generate anxiety about health and safety. How, then, does community life and the construction of a sense of 'home' take place when there is such a background of danger? It does most certainly take place, as the community of Los Alamos is vibrant and there are many who are proud to call it home, but the way in which this process is affected by the awareness of danger and destruction is an important sociological question.

Home and Subject Formation

A critic may object that the researcher's studying of their own home compromises any bid for objectivity. After all, they could fairly say, the researcher in this case

cannot hope to achieve the disinterestedness required for such a study. To begin with this formulation may be a misconstrual of passion and disinterestedness. Disinterestedness is often associated with the scientific ideal of neutrality in research such that passion is factored out or carefully controlled. But all researchers have passion and interest in their subjects at some level-- indeed they must be motivated to choose them in the first place! So projects and studies entail some kind of personal draw and motivation for researchers. Those who are motivated by money or prestige are likewise passionate and interested on those grounds.

The fervent passion of a researcher for a newly-chosen topic that is foreign to them can lead to the kind of zealotry about it that also would be said to compromise objectivity. In this way the relationship of the researcher to their own home could be more disinterested. Being so familiar with their topic at the level of the everyday and the mundane, there is a certain sense of boredom with it that contributes to nonattachment to the object of study and allows a synoptic and analytical perspective on it.

It may be rejoined that the researcher in this position is ineluctably subjective in a way that inevitably undermines the study. But, this objection seems upon closer inspection to reveal a strength of this form of study. To be sure, the concepts of objectivity and subjectivity as they are often presented are overly schematic and don't pay heed to the epistemological or ontological issues involved. Subjectivity and objectivity are not separate and opposing categories, such that the presence of one negates that of the other. While in some cases

they strive against one another, in others they are not so necessarily opposed. In *Being and Time* Martin Heidegger puts forward a strong argument that subjectivity and objectivity are constituted together since both subject and object are part of the relational phenomenal world and thus must be abstracted and set aside from one another in order to be treated as separate subject and object of study. The same movement which designates a thing as separate and distinct also sets aside the subject as separate, autonomous, and capable of scientific observation. In the instance of a researcher studying a place intimately familiar to them, there is an empirical example of the co-constitution of the subject and the object such that it is very difficult to pry them apart and treat them as distinct entities.

This is a case where the researcher is indeed *subjective*, but where their subject itself has been formed by the object that they are studying. And, as a part of that process, they have actively participated in the ongoing and everyday life of the context of their study. The researcher's subjectivity, including their sense of self, their values, their education, and their language, is sedimented by layer after layer of influence and imprint by their object of study. In this way such a researcher is extremely *objective* since their subjective life and their self *is* to a significant degree the place studied.

Self and World in Social Study

All sociological study, all observation, and all philosophy involve the immediacy of the researcher or thinker. It is always through our particular sense perceptions that we relate with the world. And our modes of relation to the world influence our sense of it in turn. Regardless of the topic studied or the type or method of study, it is always reliant upon the sense perception of the researcher and upon their thought and time. The study emanates from and is involved in the life of the researcher. We might customarily say that an empirical process of study starts from the things themselves and then goes via the researcher (and careful methodological control) to publication of results, but in fact the process emanates from the researcher who chooses and focuses in on an object of study to begin with and sets the cycle in motion. And the steps in which the observation and consideration are carried out by the researcher are important and variable steps which depend heavily on the self and experiences of the thinker. What the researcher notices, observes, and records in the first place is heavily dependent upon their subjective states of being. Several scholarly examples serve to provide conceptual clarification on this point.

Joan Stambaugh, expert European philosopher and Zen Buddhist, has written several books on the Zen master Dogen and his philosophy of time and perception. Buddhism, and Hinduism before it, already had long onto-epistemological traditions considering knowledge of the world (universe) and the nature of the self by Dogen's time in the 12th century, and he took up this longstanding deliberation. According to Dogen in Stambaugh's interpretation, the

question of the world out there and the self, the objective/empirical and the subjective, is largely an inappropriate one since these are such co-involved factors. He points out that perception and thought and impression of the world at large involve our selves necessarily, and that our bodies and ourselves are also part of the material world that we are considering. Furthermore he notes that our only point of access for study of and material connection to the universe is our selves. We learn about the world as we study ourselves and we learn about ourselves as we look into the world. This movement, alive in all study and all being, can be seen in its particular light in the study of a place or situation already so familiar to and involved with the researcher. In fact Dogen recommended domestic practices like dishwashing and cooking as eminent means of finding out about the world (universe). Can studying one's home and home life itself be far off?

Heraclitus of Ephesus, a pre-Socratic Greek philosopher, was also concerned with methodological reflections of just this kind, namely, the relation between the knower and the known, the self and the world. While Heraclitus in general emphasized study of the world and de-emphasized the role of self-centered inquiry, saying in fact that "(Personal) pride is to be more quickly extinguished than a raging conflagration," he also, like Dogen, was aware of the intimate tie between the self of the inquirer and the process of inquiring into the world. In a pithy and crucial fragment, Heraclitus says that, when it came to such study and inquiry into the world, "Ἐδιξήσαμεν ἑμᾶυτον," *ediksasamen emeauton*, or, "I consulted myself." In light of his other warnings about personal pride and

excessive self-involvement, it can hardly be that he was encouraging the kind of selfish and self-centered approach taken, for instance, in psychoanalysis. Rather, his sensibility seems much closer to that of Dogen in terms of recognizing a fundamental material and epistemological tie between the researcher and the subject: one could only find out about a topic in the world by proceeding via the means of one's own perception and own thought. He outlines an approach which is not merely a digression into one's own internal states of being and feeling, but instead one which is aware of the way that one's self is already connected to the world to be known in myriad ways. As Henri Bergson puts it, the point is not just to describe and list off the external aspects of an object of study, but to strive to know it directly from inside. This set of reflections, too, bears on the situation in which the researcher is already intimately tied to and shaped by the context of study.

A third example along these lines comes from French historian Michel Foucault, who said in interviews that, though they might be useful for political action or for other historians and researchers, the fundamental purpose of his studies was 'self-transformation.' Given Foucault's methodological considerations in other places where he discusses the role (or death) of the author and the importance of genealogy or archaeology, it is doubtful that he means that the researcher's motivation should be an exalted form of selfishness or self-worship. Much rather it seems that, like Heraclitus, he is emphasizing a deep tie between researcher and topic, subject and object. If academic work can be transformative politically or in terms of understanding of a topic, do not both of

these forms of transformation rely upon self-transformation? And is there not an important ethical dimension to this kind of approach, taking responsibility not only for increasing one's knowledge about something through study, but also for challenging and improving oneself as part of the process? It could even be said that this mode of approach aims at a self-training and formation which is crucial to the development of the responsible citizen: taking charge of one's own education and striving in order to improve one's usefulness to the society in the understanding of social problems and fomenting of social change.

A fourth example of this kind of methodological reflection comes from the feminist and Students for a Democratic Society slogan that 'the personal is the political,' and the waves of academic and critical work that have followed from it. Although in its excesses this slogan was taken to justify an unassailable ethic of personal irresponsibility, this was neither the early nor the most vibrant sense of it. Rather, it is aimed at uncovering and playing up just the same kind of awareness of the intimate connection between the self and the world that we have been evaluating here. Like C. Wright Mills' sociological imagination, the thinking here does not aim only to justify anyone's personal experience as political or sociological *willy nilly*, but to encourage an awareness that one's personal life is inextricably tied into and shaped by a myriad of political and social currents that we are part of, and that often we don't pay heed to these currents because of the fiction of our individual, distinct, and autonomous subjectivity. Thus feminist scholarship and concerns about care work, and about cooking and cleaning and child raising are not focusing on these activities as individual

practices, but as practices engaged in by individuals that have realms of sociological and political dimensions which have been ignored. It is telling that Dogen focused in on just these types of activity in his considerations on life and knowing.

The sociological tradition is replete with examples of researchers whose work has been animated by this approach. To be sure, C. Wright Mills and Erving Goffman were continually reflecting on this interplay of the self of the researcher and the social world, and both paid attention to how the social self is formed by our encounters and experience with the world. Both encouraged attention to the placement and status of one's self in relation to broader social dynamics. Mills seemed to go as far as to propose this as the most important duty for sociology. The depth and detail of Goffman's studies into the constitution and presentation of the self in the social world clearly indicate that these are not separate and distinct realms, but part of the same process of social interaction. The phenomenological tradition in sociology has taken up this issue again and again. Edmund Husserl was deeply interested in the qualities of human sense perception and the way that it and our subjective self affect our research. Alfred Schutz and Aron Gurwitsch both elaborated these questions to a greater degree in terms of social study and analysis. Although, of course, Schutz' methodological emphasis that the social situation studied by the researcher can be of cognitive, but not of practical, interest to them would not obtain for a situation where the researcher is studying a context with which they are already intimately familiar such as we are considering here. Harold Garfinkel and

ethnomethodology are also deeply interested in the structural relations of the perceiving researcher and the social world.

Approaches that combine the position and involvement of the researcher with inquiry into the world are not new or unprecedented for social research. According to this set of considerations, community studies by researchers who are intimately familiar with the place they are studying, due to having been personally formed and imprinted by it, offer some distinct methodological advantages which ought to be considered in the frame of social science research. Such approaches not only take up some of the most important currents of sociology and philosophy, they also offer a good chance of presenting detailed and caring expositions of the communities studied.

Chapter 3

The Wen Ho Lee Affair: Between Science, Race and National Security

Globalization, Empire, and Security

While naïve formulations of globalization hold that it is a generalized process of the sweeping away of borders in the increasing circulation of goods, capital, and people, it is clear enough that this is not a smooth or unidirectional process. Far from resulting in an automatic overriding of the nation-state, globalization is, instead, resulting in its reshaping and redefinition. In some respects the state takes on novel roles and in others it intensifies roles it has long held, and overall the increasing porosity of nation-states has not resulted in diminished anxieties about national security and national identity: in fact quite the contrary. Hence while global flows of capital and of people are indeed significant and augmenting, nationalisms, anxieties about ethnic mixing and ethnic cleansing, and paranoia about security and safety have by no means been swept aside. Certainly in the wake of September 11 there can be little doubt that the nation-state and its military apparatus remain decisive forces affecting world affairs and the relations between people. In terms of this dynamic of globalization and nationalism, the episode around Wen Ho Lee is telling indeed, as it ties in national security, national secrets, and the issues of ethnicity and national loyalty. It is an important event indeed in turn-of-the-millennium security.

Further, the controversy surrounding Lee plays on the central element of U.S. empire: nuclear weaponry. While of course complexly related to U.S. economy and society, the nuclear bomb is the preeminent symbol of U.S. global

dominance post World War II. The bomb fits neatly, if troublingly, into the narrative which tells that the U.S. essentially won the war and 'saved the world for democracy.' Of course this narrative covers over the tremendous contributions and sacrifices made by a number of other nations, not the least of them by the Soviet Union, but such a messianic story is necessary to present the U.S. as intrinsically peace-loving, just, and democratic in order to deflect attention from many moves of U.S. economic imperialism after the war and from the atrocities committed by the United States in the war, namely in the atomic bombings of Hiroshima and Nagasaki. A vast portion of the U.S. industrial and technological infrastructure in the last 60 years has remained primarily and exclusively dedicated to the development and production of new weapons, and the role of this 'permanent war economy' in the economic life of the nation can scarce be underestimated.¹⁹ Thus in a 1990s moment when the situation in world power was markedly changing and globalization seemed increasingly to be the order of the day, the fate of Wen Ho Lee was directly about the ongoing status of U.S. empire. If talk of the 'end of the Cold War' and of the 'peace dividend' seemed for some years to threaten the existence of the massive U.S. National Security State which proliferated in the Cold War, Lee's treatment showed clearly that this bureaucracy, and the nationalist fears and preoccupations on which it fed, would not go gently into the good night of trade as the primary factor determining relations between states. Certainly it was hasty

¹⁹ See for instance Sidney Lens, *Permanent War*, New York, Schocken, 1987, and Stanley Aronowitz, *The Death and Rebirth of American Radicalism*, New York, Routledge, 1996. Also see of course the NSC 68 working paper on "United States Objectives and Programs for National Security," of April 15, 1950.

to proclaim that states themselves had been superseded by global economic flows, as national security remains a major issue and a major anxiety. In addition, significant differences and tensions remain within Capital which act against a simple push toward globalization, such as conflicts between military industrial Capital more tied to the nation-state and finance Capital which favors liberalization.

The Wen Ho Lee Affair

The case of wrongly-accused nuclear code physicist Wen Ho Lee, pronounced to be one of the most damaging spies in national history by the U.S. government, is both shocking and informative in a number of respects illustrating the operation of the U.S National Security State and the continued change and anxiety in ethnic composition of the U.S. population. The manufacture of the case itself, and the speed and hysteria with which it caught on, are indicative of significant forces (in terms of bureaucratic and political inertia) and of nationalistic and xenophobic attitudes prevalent in U.S. society. While the history and national narrative of the United States is centered around immigration and migration, and in terms of current policy the U.S remains a major country of immigration, there is nonetheless a strong isolationist and eurocentric contingent in U.S. political and cultural life which hearkens to the Aryan dream of a white fortress America. This American nationalism is by no means new, but it is represented in contemporary garb by faces like Pat Buchanan, who continuously returns to the same tired and troubling themes of the decline of the white race

and the dilution of the Christian church in America and the like. In his most recent diatribe, Buchanan even goes so far as to say that the current cultural crisis and weakening of vigor of the United States is due to the nefarious effect of Critical Theory in the country (hence allowing the casting of aspersions on those troublemaking Communist Jews who came here after World War II and deigned to criticize the 'market democracy' of the U.S.).²⁰ Hence the controversy and the blunders surrounding Wen Ho Lee are not only about the institutionalized paranoia and the bureaucratic operation of the U.S. national security organizations, they are also centrally about the ethnic self-image of the country, and about the *de facto* status of the U.S. population versus the representational and ideological narrative of Americanness, which only partially and poorly pays heed to this *de facto* situation.

The Wen Ho Lee Affair, the particular set of accusations and reactions and actions undertaken around Wen Ho Lee, is crucial to examine in terms of the way that it ties so immediately and irrevocably to the operation of the National Security State, with its fears about national vulnerability, construal of enemies to the national interest, and acceptance or suspicion of domestic populations depending upon this index of international threat. The fact that those of certain backgrounds and perceived ethnicities (mostly European, but also African) are relatively directly accepted within the fuzzy envelope of 'American' while those of other ethnicities, such as Wen Ho Lee for instance, are held in a kind of

²⁰ Patrick J. Buchanan, *The Death of the West: How Dying Populations and Immigrant Invasions Imperil Our Country and Civilization*, New York, Dunne, 2002. Ironically, I saw Buchanan's book displayed side-by-side with Wen Ho Lee's *My Country Versus Me* in the Dallas-Ft. Worth airport on a recent trip to New Mexico to visit Lee.

'permanent foreigner' status despite naturalizing or even being born in the U.S. illustrates the unfolding of this national-identity tension. From a tradition of Foucault-style 'writing of the history of the present' the Wen Ho Lee Affair is also crucial to analyze in terms of the way that it is the immediate precursor to the current paranoid security response in the aftermath of September 11.²¹ The way that 'those of Middle Eastern descent, Arabs, and terrorists' are now held up as the locus of suspicion and potential national threat was presaged by the way that the People's Republic of China and its reputed army of spies in the U.S. were vilified a few years ago. At that time, security briefings in Los Alamos warned that the presence of so many Chinese restaurants in the town was a sure sign of espionage activity.²²

Race in the Case

One of the most shocking, and least deniable, elements of the Wen Ho Lee Affair is the direct and disturbing way that race and racial profiling were major elements in the generation and propagation of the case. Initial announcements about the flawed case amounted to serious allegations about the obtaining of advanced U.S. nuclear weapons designs by the People's Republic of China which was said to be due to certain espionage, and which therefore led to hasty conclusions about 'Chinese' scientists within the national security infrastructure.

²¹ French Historian Michel Foucault described his approach as one of writing a variety of histories, for instance about criminology, madness, sexuality, and modern clinical medicine, which would specifically bear on the contemporary state of affairs and help to inform current political struggles. He called this approach 'writing the history of the present.'

²² Los Alamos and Department of Energy Operational Security and Counterintelligence briefings.

Upon closer scrutiny in the unfolding of the case, none of the claims of the initial story would stand up. In fact it seemed that the Chinese had not obtained all the most sophisticated designs of U.S. weapons, and had certainly not tested an exact copy of one of them. There was no evidence of the kind of massive espionage which was originally claimed. And, furthermore, there was no smoking gun or lighted trail leading directly to a number of Chinese-American scientists working as sleeper agents for the PRC. Despite the fact that these major suspicions were dispelled somewhat early in the Affair, the suspicion of Wen Ho Lee persisted, and he continued to be subjected to the most nefarious and suspicious type of treatment himself. Even as the doom and gloom stories of Chinese nuclear theft dissolved under inspection, the specter of the slight and mysterious Taiwanese-American man who worked at the heart of the bomb industry continued to haunt the national imagination.

Of course allegations of treason and espionage have historically provoked the most intense kind of legal and cultural response. These are special crimes in the public imagination as they seem to endanger the country itself, and all the citizens of it. Such sentiment and such crimes are at issue, for instance, in the case of Damiens the Regicide whose brutal treatment at the hands of the state was detailed by Foucault in *Surveiller et punir*—for Damiens had acted against the Sovereign and therefore against the very symbol of the state itself.²³ Foucault gives a close description of the way that Damiens was singled out for a special kind of public and brutal torture which was supposed to measure up to the egregious act he had committed in acting against the King/state. In addition,

²³ Michel Foucault *Surveiller et Punir*, Paris, Gallimard, 1975.

the public spectacle of his torture by hot pincers, burning sulfur, boiling oil, drawing and quartering, and the like was to serve as a symbol and warning to all who would dare to attack the power and integrity of the state through demonstrating its power and vindictiveness. Indeed it was disingenuously claimed by Paul Robinson, the Cold-Warrior President of Sandia National Laboratories, that Wen Ho Lee had directly endangered the safety and security of the entire U.S. population. He testified not only that the detonation of such a weapon could kill millions of people in a city, he also opined that the Federal Judge overseeing the case, James A. Parker, faced a 'you-bet-your-country decision' in deciding whether or not to let Lee be freed on bail pre-trial: the appeal to nationalist paranoia and themes of the high Cold War are unmistakable in Robinson's pronouncements.²⁴ Curiously, just days before this testimony Secretary of Energy Bill Richardson, one of the major and most vitriolic actors in the prosecution of Lee, visited Robinson and Sandia National Laboratories and announced that hundreds of anticipated layoffs and budget cuts there would, in fact, not take place.²⁵ Here we see clear evidence not only of crooked politics, but also of the national security infrastructure acting to ensure its survival and continuation. A Los Alamos nuclear weapons physicist, Richard Krajcik, testified that the Lee tapes were 'the Crown Jewels' of U.S. nuclear research. Again, the connotations of national pride and safety are readily evident. In summing up the government's case against Lee's bail on December 13, 1999, Assistant U.S. Attorney Robert Gorence outdid himself in stating that, "I assert to the court that

²⁴ Bail hearing in Federal Court, Albuquerque, New Mexico, Dec. 29, 1999.

²⁵ *Albuquerque Journal*, December 1999 and interviews with Sandia and Los Alamos personnel.

the risk of his liberty pending trial is so enormous...the 'community' in this case is 270 million persons that face a degree of peril by virtue of what he did." This overzealous prosecutor literally stated that Lee endangered every citizen and resident of the United States through his supposed crime against the state itself.

Treason is an exemplary crime in the sense that it immediately draws into question who is loyal and who is antagonistic, who is a member of one's community and who is a foreigner. The spy is the very figure of the enemy of the state. Thus many significant controversies surrounding supposed treason have centered around questions of ethnicity. In France Captain Dreyfus of the army, who was a Jew, was accused of divulging guarded defense secrets to Germany. The accusations against him, seemingly based in no evidence just as in the Lee case, said much more about the situation of a French society in continued crisis over the role of Jewish citizens, and a lingering uncertainty about their 'Frenchness.' In this liminal position within French society but not entirely within the French national imagination, French Jews were like the 'strangers' described by Georg Simmel. In his famous essay "The Stranger," Simmel had used the situation of Jews in Europe during several centuries as the very example for the peculiar type who is not entirely in the in-group nor completely part of the out-group, but who hovers in between. The stranger for him is not someone who is entirely foreign or new or unrecognized, but rather someone who lives within a given society and has a function and a space there, yet who still remains somewhat foreign, somewhat distant, and not entirely incorporated into the self-image and full acceptance of the society at hand.

Several decades later the U.S. was experiencing parallel anxieties over whether or not, or to what degree, Jews were in fact American. In a society of increasing anti-Communism, Jews were portrayed as being stalwarts of the Communist cause, and as a potential 'enemy within.' Thus it was that the hysteria surrounding Julius and Ethel Rosenberg was generated and propagated. They were portrayed as exactly the kind of nefarious traitor enemy who cuts at the quick of the nation, and they therefore illustrate the most profound tensions about membership in American society and nation. It is the 'stranger' status of such figures that leads to such extreme action against them: they are not purely and simply the other or the enemy, but are those who are said to have deceived and taken advantage of a society to gain its benefits while at the same time betraying it. Hence they are treated in the same draconian manner as Damians the Regicide whose case was described by Foucault.

The case of Wen Ho Lee, who was in fact threatened with execution by the FBI through references to the Rosenbergs and their fate, comes at a point several decades later still, with the United States experiencing another kind of anxiety about the status of its ethnic makeup and national picture. Millions of Chinese-Americans are living in the United States, yet there is a lingering ambiguity in the national conception as to whether or not, or to what degree, Chinese are American. Chinese-Americans work in every sector of U.S. society and live in every state, yet there is still a political and cultural uneasiness as to the role of Chinese in the United States. The accusations of Wen Ho Lee and the pictures created of him by the government and by the media are predicated

upon exactly this kind of ambiguity about the membership and belonging of Chinese in the United States. Lee, a naturalized U.S. Citizen who had devoted his scientific life to the U.S. defense industry, was still held to be so suspicious and so mysterious because he was Chinese, because of his face and ideas about his demeanor.

Racial profiling, extensively used in the United States, from the New Jersey Highway Patrol to the Los Angeles Police Department to the Federal Bureau of Investigation and the Customs Service, bears upon groups in regard to which there is an ongoing anxiety in dominant U.S. society. It is widely known that the majority of the prison population is African-American and Latino, yet it is also widely known (despite racist conservative protestations to the contrary) that most crimes are not, in fact, committed by members of these groups. Rather, the make-up of the prison population has much more to say about structural racism in the criminal justice system and about racist suspicions at the core of dominant U.S. culture. No studies indicate that racial profiling fulfills any constructive or useful function in law enforcement, and it has begun to be challenged at many levels, yet it remains central to the *modus operandi* of all law enforcement agencies in the United States. Sociologically, this says a great deal about dominant conceptions about who is American and about who are 'respected' or 'normal' (or accepted) members of the society. Not responding to actual threats or well-defined situations, these techniques of profiling are, rather, extended practices of disciplining large segments of the U.S. population which have a somewhat liminal or 'stranger' position in the nation and national conception.

Racial profiling was at the crux of the Wen Ho Lee Affair. When the specious story was broken in the *New York Times* articles of March 1999 alleging that China had stolen the most advanced and critical secrets of the U.S. nuclear weapons research program, the paper irresponsibly and erroneously announced that this nefarious deed had been carried out by a Chinese American computer scientist at the Los Alamos National Laboratory. This fairy tale, the one which turned out to be entirely fabricated, based on no evidence, and part of a paroxysm of U.S. security paranoia, fit perfectly into the ongoing dynamic by which U.S. nationhood is defined in opposition to prominent external enemies and the domestic populations which are cast as the agents of these enemies. In like fashion, after the Japanese attack on Pearl Harbor, President F.D. Roosevelt signed Executive Order 9066 authorizing the internment of Japanese Americans in concentration camps, with no regard to the citizenship or loyalty of those interned. It became undeniably clear in the unfolding of the Wen Ho Lee Affair that he had been selected as a suspect and as a target solely and simply on the basis of his ethnicity—or rather perceived ethnicity. The fact that Lee is Taiwanese American and had been born and raised in Taiwan before being naturalized as a U.S. citizen was apparently totally overlooked or missed by hasty investigators. Why Lee would aid the People's Republic of China with nuclear arms that they repeatedly threatened to use against Taiwan, where he still has a number of family members and friends, is a crucial question. Nonetheless, racist and paranoid investigators soon singled out Lee. Robert Vrooman, former head of counterintelligence at Los Alamos and a former CIA

case officer, gave a strong statement to the Federal Court: “Agent Messemer’s statement that the individuals selected for investigation were chosen because they fit a ‘matrix’ based on access to W-88 information and travel to the PRC is false. Dozens of individuals who share those characteristics were not chosen for investigation.” In explaining why these dozens of others were overlooked while Lee was so scrutinized, Vrooman said in no uncertain terms that, “It is my opinion the failure to look at the rest of the population is because Lee is ethnic Chinese.”²⁶ Such forthright statements from someone so intimately familiar with the investigation can leave little doubt that racial profiling was the driving force in the investigation and maltreatment of Lee.

The accusations of Lee were particularly curious since there seemed to be no trail of indications at all linking him to the supposed breach, much less a clear and conclusive evidence tying him to the leaks. Vrooman, one of those most closely involved in the case, said that he had “worked on this case since June 23, 1995. I know that there is not one shred of evidence that the information that the Intelligence Community identified as having been stolen by the Chinese came from Wen Ho Lee, Los Alamos National Laboratory, the Department of Energy or from a DOE office.” Not only was there no trail pointing at Lee, there was not even any information incriminating any part of the Department of Energy! In light of this gaffe, Vrooman indicated again that “it can be said at this time that Mr. Lee’s ethnicity was a major factor” in the undeserved scrutiny and blame that he received.

²⁶ Robert Vrooman, sworn statement to Federal Court of New Mexico, in *U.S. vs. Wen Ho Lee*.

Not only did Vrooman and others indicate clearly that Lee had been singled out based on his ethnicity, in addition they questioned the very assumption that, had a loss of U.S. secrets to China occurred, it was likely to have been carried out by ethnic Chinese. Thus they absolutely undermined the foundation for any racial profiling in such espionage investigations. Vrooman continued in his statement to say that:

The contention that the Chinese target ethnically Chinese individuals to the exclusion of others, therefore making it rational to focus investigations on such individuals was not borne out by our experience at Los Alamos, which was the critical context for this investigation. It was our experience that Chinese intelligence officials contacted everyone from the laboratories with a nuclear weapons background who visited China for information, regardless of their ethnicity. I am unaware of any empirical data that would support any inference that an American citizen born in Taiwan would be more likely than any other American citizen.

In explaining the lack of any link between Chinese Americans and the intelligence services of China, Vrooman refuted any rational presumption on the suspicion of domestic Chinese populations in the United States. In effect, he was saying that there are no grounds on which to regard Chinese-American scientists as 'strangers' in the sense that Simmel described, and he was calling attention to the way that suspicions of them are indices of national anxieties in U.S. society rather than sound government practice.

Robert Vrooman was not alone in criticizing the security rationale for racial profiling in the Lee case. Charles E. Washington, who had been head of all counterintelligence for the Department of Energy, the government agency which

oversees all nuclear research in the United States, also cast serious doubts upon the accusations against Lee and the way that they were derived. He also refuted the notion that Chinese Americans are 'strangers' who live in the United States but owe allegiance to China:

In the counterintelligence training I have received and in my counter-intelligence experience, I am unaware of any empirical data that would support a claim that Chinese Americans are more likely to commit espionage than other Americans. Further, I know of no analysis whatsoever that has been done as to whether American citizens born in Taiwan would be more likely to commit espionage for the People's Republic of China.²⁷

Such a statement from someone so prominent within the national security bureaucracy and responsible for carrying out espionage investigations is damning indeed to the case which was made against Lee, and shows demonstratively that what was at issue was much more a panic about the status of U.S. society, in terms of its ethnic composition, and U.S. empire.

As there was no justification for focusing on Chinese Americans in this nuclear espionage investigation, and indeed the dire allegations made about Chinese nuclear theft were refuted wholesale, the only remainder of the case seems to have been an intense paranoia about Chinese Americans working at the heart of the U.S. defense industry. Despite the fact that Lee's life, in terms of his home, his favorite practices (cooking, fishing, 19th century European literature and music), his family, and his daily routine, resembled very closely that of many other scientists with which he worked at Los Alamos, he was held out for a

²⁷ Charles E. Washington, sworn statement to Federal Court in *U.S. vs. Wen Ho Lee*.

special kind of suspicion and lingering doubt. In effect, Lee was treated as Simmel's 'stranger,' and was freighted with a kind of permanent foreigner status despite his U.S. citizenship and his career-long dedication to national defense. The fact that other scientists at Los Alamos, or at other national laboratories, who are also naturalized U.S. citizens, but who are from European countries such as Germany and Italy, are not viewed in the same 'strange' and 'persistently foreign' light, while yet other researchers from, for instance, India or Pakistan, are viewed with the same kind of uncertainty as Lee indicates an underlying tension in American society about the ethnic self-image and ideology of the nation. While the American population includes large numbers of Asians who live and work throughout the society, the history, government, and mass culture of the nation remains largely eurocentric and white in its ethnic valence. Of course these representations and institutions are in change, but the fact that they are changing highlights and fuels anxieties over what new forms of ethnic self-imagination and national picture will emerge in the United States. Within this dynamic, the Wen Ho Lee Affair is a pivotal event in the adjustment of the U.S. imagination to include Chinese Americans and in the resistances still present to this adjustment.

The controversy surrounding Lee is of course not isolated or without its history in the United States. The kind of racism directed against him and undergirding the wild claims against him is but a continuation of anxieties about the Chinese which have long troubled U.S. society. The Chinese Exclusion Acts, formally forbidding Chinese from becoming U.S. citizens, stand as a reminder that the country's law and society were long hostile to Chinese immigrants, and these

prohibitions remained in force well into the 20th century. In addition, a notorious dissenting opinion by Justice Harlan in the Supreme Court decision on *Plessy v. Ferguson* demonstrates some of the tenor of this xenophobia: “There is a race so different from our own that we do not permit those belonging to it to become citizens of the United States. Persons belonging to it are, with few exceptions, absolutely excluded from our country. I allude to the Chinese race.” In addition to showing a profound anti-Chinese racism and the presumption of an absolute difference in lifestyles, Harlan’s opinion is curious in the respect that he refers simply to “our own (race)” when, even in 1896 when the case was heard, U.S. society was hardly composed of one distinct ethnic group. The fact that he nevertheless refers to ‘our own race’ indicates an ongoing process of deeming and designating who and what was ‘properly American’ versus that which remained foreign.

The suspicion against Lee, and the justification, if it can be called by that name, of the actions taken against him rest entirely upon this uncertainty and tension within American society about the standing of Chinese people. Not only was Lee singled out for scrutiny because of his ethnicity, as Vrooman conclusively demonstrated, but throughout the entire investigation and prosecution his ethnicity was consistently used as the lynchpin for his treatment. When the FBI and the U.S. Attorney sought an unreasonably broad and vindictive search warrant for Lee’s home, they stated that he was suspected because he is ‘overseas ethnic Chinese.’ When they were attempting to persuade Judge Parker to deny pre-trial release of Lee, FBI Special Agent

Messemer testified that Mandarin Chinese is a duplicitous language which is inherently given to espionage, and he added that Lee's behavior was 'nefarious.'²⁸ Following similar misguided notions, the government would successfully seek a court order banning Lee from speaking Mandarin with his family during their severely-restricted visits each week, despite the fact that this was their usual language of communication. It is inconceivable that a current court would make a parallel ruling concerning, for instance, the speaking of Spanish or German, yet it is all-too-imaginable that such a prohibition would be made concerning the speaking of Arabic in this latest round of national security and ethnic paranoia in this country.

Given that the crux of the government case turned around the axis of casting Lee as an untrustworthy 'stranger,' it is necessary to take the racism inherent in this attitude to task. A great degree of abusive leeway was afforded to the FBI and to the Department of Justice because of their invocations of paranoid and bigoted attitudes about Chinese Americans. Their presentations of Lee as nefarious, deceptive, and inscrutable played upon some of the oldest and most problematic of discriminatory attitudes concerning the Yellow Peril and the devious and brilliant Chinese criminal. Since in the end the furor was based upon no evidence whatsoever, it was *only* these racist attitudes which sustained the accusations and the draconian treatment of Wen Ho Lee. The blend of fear about national security and anxiety about Chinese 'strangers' proved a successful enough recipe to allow the Justice Department to incarcerate Lee for nine months pre-trial in solitary confinement, during which time they engaged in a

²⁸ Bail hearing in Federal Court in Albuquerque, New Mexico, December 29, 1999.

number of thinly-veiled actions to torture him. In addition to prohibiting him from speaking Chinese with his family, they limited family visits to one hour a week during which FBI agents were always present, kept him indoors in a cell with no windows for more than a month, kept his cell lighted and supervised by a guard at all times to deny his privacy, kept him shackled at the wrists and ankles during all movements and exercise, and gave him inadequate clothing and bedding to be warm enough in a cold cell during the winter.²⁹

Of course the conduct and allegations of the government during the Affair were shocking and reprehensible, but almost more troubling is the way that much of the racism which sustained the case survived its official unraveling and has persisted until now, even among ostensibly critical treatments of the case. The *New York Times*, bearing a major responsibility for the Affair due to its factually inaccurate and inflammatory articles of March 1999, was moved to issue a kind of apology when it became clear that it was implicated in a major embarrassment. While this 'apology' did indicate some wrongdoing on the part of the paper, it held onto a troubling and racist portrayal of Lee as still suspicious in his actions and person, as if to allege that the paper's claims were not so off-base after all, since clearly there were many things still mysterious and unaccounted for about Lee. It is precisely this notion of the impenetrable mystery of the East which underlies a significant anti-Asian racism and which buttresses the 'permanent foreigner' status accorded to Asian Americans. Thus the *Times*

²⁹ From Wen Ho Lee, *My Country Versus Me: The First-Hand Account of the Los Alamos Scientist Who Was Falsely Accused of Being a Spy*, with Helen Zia, New York, Hyperion, 2001, and discussions with Wen Ho Lee.

never moved far from the presumption which motivated the entire prosecution. And, in effect, it was still able to allege that Lee was guilty.

One of the first books to appear on the matter, written by two journalists who covered much of the case, is saddled by the same presumption of lingering mystery on the part of Lee and contains so many factual inaccuracies that its interpretation of the case is tenuous at best.³⁰ Lacking a thorough understanding or research grounding about either the national security bureaucracy or the community and laboratory of Los Alamos, the book goes astray at a number of points and lapses into the style of a Cold War spy novel and tale of intrigue rather than critical historical account. While being published first and playing into this espionage narrative have guaranteed the book a great deal of attention, it has little merit as a close study of the Affair. One of the primary problems of the book is that it is severely constrained by the ethos of journalistic objectivity. In the goal to 'cover both sides of the story' the authors do criticize the government's excesses in the case, but they also retain the government's self-same suspicion of Lee without being able to interrogate the sources and dimensions of this suspicion. Trying to cast blame on both Lee and the government results in an overview of the case which fails to analyze many of its most important dimensions. In addition, they end up repeating a number of false claims made by parts of the government, either in the prosecution or in committee reviews of

³⁰ For instance, as Lee pointed out to me when we were discussing the book in February 2002, the authors reverse the names of his mother and father. Also, they mistake the famous wartime Santa Fe address for then-secret Los Alamos, P.O. Box 1663, for the erroneous 'P.O. Box 1337.' These and many other blatant inaccuracies seem to qualify the book better as fiction than as history. The book is *A Convenient Spy: Wen Ho Lee and the Politics of Nuclear Espionage*, by Dan Stober and Ian Hoffman, Simon and Schuster, 2001.

alleged Chinese espionage, which were conclusively laid to rest during the denouement of the case. In their persistent portrayal of Lee as a mid-rate scientist whose actions seemed curious and without direct reason, they fail to call into question the way in which Lee was figured as suspicious 'stranger' by the government and the media (of course, as journalists, they had contributed to this portrayal during the case). Furthering this severe misunderstanding is the fact that the authors did not interview Lee at all, thus they repeat a very dangerous element of the case in the silencing and rendering obscure of Lee himself. It is undeniable that one of the goals of the government's ploy to keep Lee in solitary confinement was to prevent him from appearing in public as a real person, true American, and family member. Keeping Lee in jail, the government was able, for some time, to control the valence of the case by portraying Lee as nefarious and inscrutable while Lee was sequestered behind bars and out of the public eye. Since Stober and Hoffman did not interview Lee, they repeat this problematic public erasure of Lee and end up falling into many of the worst pitfalls of public opinion which surged forth during the case.

A third area in which the racism of the case has remained relatively uncriticized is in academic responses to the Affair. While a certain tone of moral outrage has been adopted regarding the treatment of Lee and the way in which the prosecution was conducted, too often the racism at the core of the case remains unexamined, much as it does in the *Times* response and in the Stober and Hoffman account. While criticism of the government is dished out, the

presumption of Lee's suspicion is often still tenaciously posited.³¹ That even those who are setting out to criticize the case are unable to see this as a fundamental issue is indicative of the persistent strength of claims made under the heading of national security and of the continuing anxiety in the U.S. concerning the loyalty and belonging of Asian Americans. At a minimum an analysis of the Wen Ho Lee Affair *must* scrutinize the presentation and treatment of Lee himself as an example of the most pernicious anti-Asian racism within the context of a United States anxiety-ridden about its ethnic constitution.

Production of Enemies by the National Security State

The Wen Ho Lee Affair illustrates clearly the process by which the National Security State of the United States not only responds to perceived external threats to the country, it also takes part in an active process to define and generate enemies which seem credible enough to justify continued operation and development of various weapons and intelligence operations. Further, the U.S. military and intelligence infrastructure is involved in a dialectical process by which it does not merely 'defend' and respond, it also undertakes actions which antagonize or frighten other societies, thus increasing mistrust and military antagonism between states.

³¹ In presentations of the case at a March 2002 conference at Columbia University on *Racial (Trans)formations* the discussions of Lee's case remained mired in problematic and disingenuous hypothetical claims that perhaps Lee was, in fact, guilty of espionage. The fact that this uncertainty, mystery, and suspicion was exactly the nefarious pedestal upon which the government's case was presented should be enough readily to indicate that such hypotheses are neither novel, provocative, nor radical. Even other activist intellectuals critical of the media have stopped short of dismissing this troubling and racist air of mystery attributed to Lee.

The history of the Cold War, for example, cannot be told purely and simply as a tale of the democratic United States responding to threats from the totalitarian Soviet Union. While of course threatening moves were made by the Eastern Bloc, for instance in the blockade of Berlin, it is also the case that a number of actions and policies undertaken by the United States and other Western powers caused fear and anxiety in Moscow. During World War II, for instance, Britain and the United States kept the Manhattan Project secret from the Soviets even while they were fighting as allies against the Nazis. At Potsdam, Churchill and Truman sought to intimidate Stalin by references to their powerful new secret weapon. Scholars in international relations and diplomatic history now agree that the use of the atomic bombs in Japan was, in part, motivated by power projection which would threaten the Soviet Union.³² Clearly, these moves would not inspire confidence or security in Moscow, and they would give the USSR a strong impetus to develop their own nuclear weapons beginning with their first atomic bomb test in 1949..

The history of the Chinese nuclear program has some similar contours. While often presented by U.S. administrations and diplomatic history as an offensive move by China to project their own imperialist power, the development of the Chinese atomic bomb was likely motivated by other factors. Mao was quite explicit in saying that China was most directly pressured to develop the bomb due to their fear of a nuclear-armed United States which continued to engage in power projection in Asia. The fact that the use of nuclear weapons was openly

³² Gar Alperovitz, *Atomic Diplomacy: Hiroshima and Potsdam/ The Use of the Atomic Bomb and the American Confrontation with Soviet Power*, 1965 New York, Simon and Schuster, and *The Decision to Use the Atomic Bomb*, New York, Knopf, 1995.

discussed in the United States during the Korean War, and that a number of politicians and generals called for the atomic bombing of China gives clear indication that the U.S. hardly inspired trust and security in Asia. Nonetheless, the Chinese nuclear program, which has never had a scope or character giving it a footing even remotely to challenge the U.S. arsenal, is frequently viewed with fear and mistrust in the West. It is important that we learn from our own fear that, indeed, other nations fear our policies and actions as well. The Wen Ho Lee Affair is characteristic in that it is a bold attempt by certain quarters of the U.S. weapons establishment (for instance Paul Robinson among others) to misrepresent China as a major threat which could hold the same kind of nuclear superpower status as the Soviet Union once had. Indeed the early, and unsubstantiated, claims such as those which appeared in the *New York Times*, all but made the claim that China had stolen all of the most sophisticated designs from the U.S. laboratories, which would allow them to close the technical and engineering gap between their nuclear program and that of the United States in one fell swoop. In a decade of uncertainty for the U.S. weapons program defined by the implosion of the major strategic rival of the Soviet Union and the end of nuclear testing, there was serious doubt about the continuation of U.S. nuclear research. The exaggerated claims about China provided a ready-made justification for continued nuclear development, as China would seem to be able to step up to take the place vacated by the Soviet Union. The fact that the W-88 warhead was at the center of the Wen Ho Lee controversy was crucial since the W-88 is sophisticated largely in the sense that it is small and compact yet

powerful. Its size allows for more than one warhead to be placed on each ballistic missile, a technical achievement known as MIRVing (for Multiple Independent Reentry Vehicles), which multiplies force power and which it was thought that China had not yet reached. Hence China's attaining of such information might result in a clear increase in their level of threat to the U.S.

As these inflated claims about Chinese nuclear espionage and development proved ultimately to be unsubstantiated, it seems that the story was not one of the U.S. defense infrastructure's responding to an external threat, but, quite the contrary, an instance of this formidable bureaucracy's acting to ensure its own survival and legitimate its existence through the demonstration of pernicious external threats. Awareness of precisely this kind of reflexivity in international relations is key if we are to be able to develop a more accurate and less unipolar-hegemonic view of world affairs: a more accurate view which can see beyond the arrogant presumption of the U.S. as the main and privileged actor in world affairs and which can see it as one actor among many others on a global scale. In short, this is the problem of U.S. empire, and it exists as deeply in contemporary political science and international relations studies in the United States as it does in the actions undertaken by the Central Intelligence Agency and the Central Forces Command (and the link between these aforementioned 'academic disciplines' and the latter military-intelligence organizations is not to be underestimated). A globalization which would take the form of an authentic new internationalism interested in just relations between people of different regions

and different nations must criticize and move beyond this problem of empire and nationalism.

Particularly important for political economy and international relations in the United States is to develop a concept of reflexivity in world affairs according to which actions undertaken by states are not read as simple responses to provocations from another nation, but also in terms of the way in which these actions themselves contribute to a sense of fear or insecurity in other societies. The current example of the foolhardy development of the Anti-Ballistic Missile system by the United States must be seen in this regard. While this program is consistently motivated and justified in U.S. public discourse by reference to supposed threats from the outside such as North Korea, whether or not they exist, a much more immediate and material consequence of the development of this system is to antagonize Russia and China because of the fact that this technology, which is most likely a technical pipe dream nonetheless, causes fear for them due to the way that it would undercut their strategic deterrent with the United States. It is in this sense that both these nations have denounced the ABM as destabilizing and as a 'first-strike weapon' which would raise the possibility of a U.S. preemptive strike. This is also why this 'star wars' missile defense clearly violates the ABM treaty and the reasoning behind it. Particularly frightening in the current U.S. arrogance over the ABM is that it clearly signals that the U.S. administration has abandoned the old deterrence logic, flawed as it

always was, in favor of a drive toward overwhelming U.S. military superiority coupled with the delusional dream of an invulnerable United States.³³

The outrageous claims leveled against Wen Ho Lee had much more to do with the generation of credible enemies by the National Security State than it did with an actual threat from the People's Republic of China, and, by extension, was aimed at guaranteeing the continued operation of the vast defense bureaucracy in the United States. Max Weber, the German sociologist and political economist, carried out a number of studies of the way that bureaucracies and organizations operate in his pivotal text *Economy and Society*. One of his main conclusions about their behavior was that bureaucracies seek to maintain themselves and to augment their functions. Rarely, he said, do we encounter organizations that voluntarily disband or relinquish responsibilities with which they have been specially charged. The U.S. National Security State in general, and the nuclear weapons infrastructure in particular, are examples of just such bureaucracies. The Central Intelligence Agency, responsible for keeping tabs on the military readiness of the Soviet Union in the Cold War, routinely overestimated the force strength of the Soviets with the effect of increasing the importance and funding of the CIA. Long tales of infighting between the different

³³ Against all existential expectations, U.S. policy and U.S. culture has long acted as if it were possible to guarantee an absolute security of the territory of the United States. Clearly an index of empire, this curious reflex ignores and denies the fact that it is the very means employed to try to give this security (the 'nuclear umbrella,' the North American Air Defense Command, etc.) which creates the danger itself. The story of Wen Ho Lee fits into this dynamic directly since he was portrayed as someone who had opened a major vulnerability at the very heart of the U.S. society and defense infrastructure. Further, Congress allocated some \$11 billion to the ABM research in April 1999 within a month of the breaking of the Lee case, and much of the associated rhetoric was about Lee and about China (*Congressional Record* 3-4/1999).

branches of the U.S. military, and the way in which they oppose one another over responsibility for various tasks, shows that these bureaucracies function as Weber said too. Hence the Air Force and the Navy each demanded a major share in the U.S. strategic nuclear posture with the result that the Navy developed a number of ballistic missile submarines such as the Poseidon and the Trident missiles, and the Air Force gained responsibility for land-based missiles in silos and for strategic bombers like the B-52, the B-1, and the B-2. Not to be left out, the Army and the Marines pushed for the development and deployment of 'battlefield' or 'tactical' nuclear arms which would be under their command and usable by field artillery. Presently, there are demands from the Air Force, the Navy and the Marines for their own advanced fighter jet, despite the fact that U.S. air power already stands markedly above that of any other nation. Indeed the National Security State of the United States behaves like the bureaucracies which Weber described.

The nuclear weapons design and development infrastructure of the United States functions in the same way. As a vast bureaucracy with many sites of research, development and production across the country, it resisted any paring down in its operations and sought to provide the necessary justification for its continued operations. Even though the 'end of the Cold War' was oft-cited as a decrease in threat and a change in the global strategic picture, various components of the nuclear community opposed significant alteration in their activities. For instance, even as Clinton was negotiating the Comprehensive Test Ban Treaty and seeking to sign on, bomb designers and testers from Los

Alamos, Livermore, and the Nevada Test Site were presenting a number of arguments, ranging from stockpile readiness and reliability to public safety, which they claimed necessitated continued testing of nuclear weapons. Of course, these cries were coming directly from those whose jobs and institutional purpose relied upon the process of contriving 'experiments' then bringing them to the desert in Nevada to carry them out in tests. Similar arguments had been heard when U.S. nuclear testing was shifted to underground testing from the prior atmospheric testing in the Pacific and in Nevada in the wake of the Limited Test Ban Treaty in 1963. At the time, scientists claimed that, with underground testing, they would be unable to develop new weapons as well as being unable to vouch for the reliability and safety of existing weapons. With the Threshold Test Ban Treaty and with caps on the power of weapons which could be tested (150 kilotons) in 1974, testers again raised arguments about their ability to develop new weapons and certify the safety of the old ones. In the 60s and 70s as in the 90s, it was the institutional survival of the weapons bureaucracy which was much more at stake than any actual external threat. Wen Ho Lee became the figure through which a concerted ploy was made to give ironclad reasons for the maintenance and augmentation of nuclear research within the Department of Energy.

The unfortunate fate of Wen Ho Lee also serves to demonstrate how, in a state where the national security infrastructure is busily involved in producing and demonstrating new enemies in order to legitimize itself, there is a particular pairing between foreign and domestic politics. Conventional reckonings of the

U.S. political spectrum treat domestic affairs and foreign affairs as if they are separate and largely distinct, but this is an analytic distinction of convenience which bears very little weight upon closer inspection. For one thing, it relies upon an unrealistic picture of the nation state as an independent and isolated unit, when in fact any nation state is in myriad points of contact with flows and pressures of various kinds which influence its situation. Through Lee's fate, as well as a great number of other historical examples, we see that the process of the designation and production of enemies by the National Security State has an immediate and automatic effect upon the way in which different portions of the domestic U.S. population are viewed and treated.³⁴ In a paranoid situation of overblown fears about China, Wen Ho and other Chinese Americans working in American defense became suspects of treason and espionage, and Chinese Americans throughout the U.S. technoscientific community reported greater levels of harassment and suspicion. The discourse about China threat had the effect of casting all Chinese Americans in the 'stranger' status discussed by Simmel. And, in a sad testament to the xenophobic nationalism of U.S. society, a number of Indian American scientists reported that they, too, came to be seen with greater suspicion or disdain in the panic of the Wen Ho Lee Affair. This loathsome U.S. panic over ethnicity and security led to the significant political intervention initiated by Ling-chi Wang of U.C. Berkeley of a boycott of all new Department of Energy employment by Asian Americans in the national

³⁴ The fate of interned Japanese Americans in World War II has already briefly been mentioned. Currently, Muslim Americans, Arab Americans, and anyone who might fit the loose and paranoid image of the 'terrorist' are under intense and unreasonable scrutiny. At the time of this writing, thousands are still being detained by the INS on flimsy or nonexistent pretenses said to be related to terrorism.

laboratories. As Wang and other supporters reasoned, not only did this spare those who might have applied for work from the same kind of nefarious mistreatment visited upon Lee, it also served to highlight the significant role played by Asian Americans in the U.S. defense infrastructure. In fact, from the boycott up until now, the Los Alamos National Laboratory has received no applications from Asian Americans or from citizens of Asian nations for their prestigious post-doctoral programs in physics and engineering.³⁵

³⁵ Interviews with LANL personnel on impact of boycotts.

Chapter 4

Wen Ho Lee's Treatment and Simmelian Perspectives on National Security

The interpretive and critical sociological works of Georg Simmel serve to highlight the sociological dimensions of the Wen Ho Lee case inasmuch as this case played itself out in a post-Cold War America struggling with a multicultural identity.³⁶ This time in the United States shares the contexts of nationalism, community life, and social cohesion taken up by Simmel in several key studies. Simmel's nuanced description of sociological settings and behaviors clearly reveals many contours of the forces contributing to the situation at hand in the Lee case (namely, the constitution of social cohesion by the determination of those proper to and outside of the community). Of course many of the aspects of the Wen Ho Lee case are quite blatant, but Simmel helps us to understand why they emerged and persist. In addition, and in keeping with the present study that situates the Lee case within the context of the community of Los Alamos, Simmel contributes many perspectives to the analysis of Los Alamos and the social practices which constitute it. By considering several of his essays ("Metropolis and Mental Life," "The Stranger," and "The Conflict in Modern Culture"), then closely looking at his writings on the secret and secret societies, we can garner a great deal about the plight of Wen Ho Lee within the town and laboratory of Los Alamos. I place these considerations from Simmel into relation with interviews

³⁶ In addition to being a crucial case study in modern sociology of science, the Wen Ho Lee affair and the racism and security paranoia that it represents is an important precursor to current efforts aimed against Muslim and Arab Americans on the pretense that they might be terrorists.

and ethnography from Los Alamos and experiences from working on the campaign to free Wen Ho Lee.

Los Alamos in Simmel's Reckoning

Simmel opens "Metropolis and Mental Life" by indicating that, "The deepest problems of modern life flow from the attempt of the individual to maintain the independence and individuality of his existence against the sovereign powers of society."³⁷ Whether in the forms of eighteenth century liberation or nineteenth century liberation, he says that this is "resistance of the individual to being levelled, swallowed up in the social-technical mechanism."³⁸ Simmel, like Marx and Weber, has a vision of the continuing rationalization of society in what he refers to as the social-technical mechanism.³⁹ He distinguishes the metropolis by saying that it is characterized by the rapid telescoping of impressions and stimuli. He says that it creates psychological conditions more prone to intellectualism and to individualism, as over against the "small town which rests more on feelings and emotional relationships."⁴⁰ Simmel maintains that the feelings and relationships of small town life are the stuff of habit and custom, while reason is located "in the lucid, conscious, upper strata of the mind."⁴¹ Already at this point

³⁷ Georg Simmel, "The Metropolis and Mental Life," reprinted from *Social Sciences III Selections and Selected Readings*, vol. 2, 14th ed. (University of Chicago, 1948). Translated by Edward A. Shils. Originally published as "Die Groostadt und das Geistesleben," in *Die Grosstadt. Jahrbuch derGehe-Stiftung* 9 (1903), p. 324..

³⁸ Simmel, "Metropolis," p. 324.

³⁹ It may be that Los Alamos and nuclear history demonstrate a significant respect in which individuals and the world in general have been drawn into the social-technical mechanism.

⁴⁰ Georg Simmel, "Metropolis," p. 325.

⁴¹ Simmel, "Metropolis," p. 325. Of course it could be said that today, due to transportation and communication technologies, the hallmarks of the big city have also

Los Alamos occupies a peculiar point since it is both a small town and intensely intellectualized. The town seems to draw heavily from characteristics of both small town and metropolis since the denizens develop emotional relationships as long-time neighbors, but they also work intimately with intellectual relationships which, “deal with persons as with numbers, that is, as with elements which, in themselves, are indifferent, but which are of interest only insofar as they offer something objectively perceivable.”⁴² Deterrence and security ‘thinking’ and the genocidal reckonings of nuclear weapons design are perhaps the ultimate examples of this form of relationship in which blast forces and thousands or millions of people killed continually increase in an absurd cycle.⁴³ So, many citizens of Los Alamos routinely practice the most cynical kind of intellectual relationships in their day jobs where additional plutonium and sleeker designs result in better “kill value,” while they spend their off-work hours practicing emotional, affective small town relationships. In truth, such emotional relationships certainly carry over to the work place, too, side by side with the intellectual relationships.⁴⁴

come increasingly to pervade small town life. The television, the personal computer, and the internet have all contributed to an augmentation in stimuli, contact and, perhaps, reserve for small town citizens since Simmel’s time.

⁴² Simmel, “Metropolis,” p. 326.

⁴³ There are many perspectives critical of nuclearism which point out that this is a particularly cold and alarming type of reasoning in which citizens risk the “nuclear numbing” written of by Robert Jay Lifton and Richard Falk in their *Indefensible Weapons*. Of course Dr. Helen Caldicott’s *Nuclear Madness* strongly argues points like this as well. Even in the non-nuclear context this kind of reckoning continues to be quite common today in U.S. interventionist practices and in the doublespeak of ‘collateral damage.’

⁴⁴ Interviews and correspondences with a number of Los Alamos scientists readily reveal both sides of this relation (the affective-familial-small town and the rational-abstracted-destructive) as well as myriad points of overlap and combination between them. Many of

Simmel sees the rise of calculative thinking and intellectualism as being driven by and caught up in the money economy. He notes that it is usually the case that substantial money economies with their houses of trading, etc., are found in metropolitan areas. Once again his analysis reveals some very crucial dimensions about Los Alamos. As a small town Los Alamos of course has nothing like a stock exchange or even substantial corporatization. Certainly substantial quantities of money are directed through the town by the U.S. government. But it is also the case that Los Alamos occupies a decisive place within another economy which is related to the money economy, but functions with special autonomy and force of its own. The economy in which Los Alamos occupies a major pole, even a sacred position, is the nuclear economy. Over the last fifty years nuclear weapons have undergirded American imperialism and diplomacy. Nuclear weapons were conferred a deadly value in their use by the U.S. in wartime. U.S. Cold War policy has continued to ratchet up the value of these weapons, rather than seeking any lasting transformations in the economy they inhabit. Even recent overtures in Iraq and North Korea have been aimed more at disciplining those countries than at altering the supreme value of nuclear arms. Nuclear weapons are a currency in international relations which far surpasses their weight in gold. Los Alamos is the seat, or a major seat, of this special money economy.

In fact, although he affords a central role to the money economy, Simmel goes on to point out that the calculation that it exemplifies has even deeper roots,

the most prominent weaponeers of the town are also devout members of churches and synagogues, little league coaches, or girl and boy scout leaders.

“The modern mind has become more and more a calculating one. The calculating exactness of practical life which has resulted from a money economy corresponds to the ideal of natural science, namely that of transforming the world into an arithmetical problem and of fixing every one of its parts with mathematical formula.”⁴⁵ The drive to calculation is also related to the ancient Pythagorean ideal that number itself inhered in nature and that life could be an exercise in deciphering these mathematical relationships and regularities.⁴⁶ Of course the Pythagorean doctrine contained many other spiritual dimensions which have been lost in the modern lust for calculation exemplified in money economy and natural science, but this need not detain us here.

The form of calculation employed in nuclear physics research is directly in the vein of that which seeks to decipher mathematical relationships in nature. One of its major branches is after all called “quantum mechanics.” As Martin Heidegger reminds us, “Hence physics, in all its retreating from the representation turned only toward objects that has been standard till recently, will never be able to renounce this one thing: that nature reports itself in some way or other that is identifiable through calculation.”⁴⁷ Nuclear physics was able, with some difficulty and growing pains, to transcend the level of the visible object, but it would be another kind of paradigm change altogether for it to dispense with calculation.

⁴⁵ Simmel, “Metropolis,” p. 327. Of course it is this same drive which animates the quantitative methods in the social sciences that came to the fore and attained hegemony in the field during the Cold War and its aftermath.

⁴⁶ The Pythagorean doctrine held not only that number inhered in nature, but indeed that numbers composed matter itself. Such a belief influenced Plato as can be seen in his *Timaeus*.

⁴⁷ Martin Heidegger, “The Question Concerning Technology,” in *The Question Concerning Technology and Other Essays*, trans. William Lovitt, New York, Harper and Row, 1977, p. 23.

What Edmund Husserl calls the “mathematization of nature”⁴⁸ remains a central tenet of modern atomic physics.

Simmel also goes on to indicate that metropolitan life and the money economy necessitate a punctuality and precision (as for appointments) that push toward a firmly fixed framework of time. This rationalization of time relates in at least two ways to the nuclear dynamic. First, it is peculiar that today atomic clocks are seen as the most accurate possible measurements of time and are used as time standards. In fact, just a few years ago the U.S. introduced a new atomic clock which is supposed to use an even more accurate Cesium-disintegration process to keep the most accurate time so far in human history. This is a rationalization of time which obviously does not see it as a human technique of social invention, but as a fixed and inexorable process occurring in nature at a fixed rate. Second, nuclear physics research, in both its “basic physics” and nuclear weapons dimensions, is incredibly indebted to highly precise calculations of timing. Without the most accurate timing, particles cannot be made to collide in an accelerator, and a nuclear weapon will “fizzle” and blow apart before the critical nuclear reaction is able to consume much of its fuel.

Once again Los Alamos occupies a most peculiar position in relation to this analysis. It is truly a place founded upon profound contradictions which are still evident in its daily doings. For instance, Simmel claims that, “Punctuality, calculability, and exactness....are conducive to the exclusion of those irrational, instinctive, sovereign human traits and impulses which originally seek to

⁴⁸ Edmund Husserl, *The Crisis of European Sciences and Transcendental Phenomenology*, trans. David Carr, Evanston, Northwestern University Press, 1970.

determine the form of life from within instead of receiving it from the outside in a general, schematically precise form.”⁴⁹ Yet Los Alamos, where punctuality, calculability, and exactness are avidly practiced, also seems to be the site of some of the most irrational and instinctive human emotions and actions. Hence it is that figures such as Heraclitus, who emphasizes fundamental contradiction, and de Sade, who imagines an “evil” rationalism, lend themselves so readily to pondering Los Alamos.

In “Metropolis and Mental Life,” Simmel describes the crucial concept of “reserve” which he says is necessary in order not to be “completely atomized internally.”⁵⁰ This notion has a delicious resonance with Los Alamos, where the danger is, quite literally, that of being completely atomized internally and externally. So if there is a need for the metropolitan dweller to adopt a kind of reserve to avoid being overwhelmed by numerous sensations, then the citizens of Los Alamos require a kind of reserve that insulates against radioactive and existential sensation.

Simmel says that a characteristic of this reserve is that it is akin to “slight aversion, a mutual strangeness and repulsion.”⁵¹ This repulsion is also a fundamental part of atomic theory in which particles experience attraction or repulsion on the basis of their electromagnetic charge. In some sense then Simmel has already begun to describe a kind of social physics in his concept of reserve. He goes on to say that this power of repulsion can “break out into

⁴⁹ Simmel, “Metropolis,” p. 328-329.

⁵⁰ Simmel, “Metropolis,” p. 331.

⁵¹ Simmel, “Metropolis,” p. 331.

hatred and conflict" when close contact arises.⁵² An apt metaphor indeed for the nuclear chain reaction.

The In-Group and the Foreign Other

There is one respect in which we can see strongly that Los Alamos does not exemplify the metropolitan reserve which Simmel describes, but is dominated by a different kind of repulsion which Simmel associates with another kind of social organization:

The most elementary stage of social organization which is to be found historically, as well as in the present, is this: a relatively small circle almost entirely closed against neighboring foreign or otherwise antagonistic groups but which has however within itself such a narrow cohesion that the individual member has only a very slight area for development of his own qualities and for free activity for which he himself is responsible.⁵³

This quotation unravels the entire Wen Ho Lee case. But the roots are so deep and the implications so profound, that we must make a few preliminary observations.

As we have been discerning, Los Alamos is a site undergirded by deep contradiction. Thus while on the one hand it does have many characteristics of the small, isolated town, and it exemplifies the kind of constriction that Simmel describes, Los Alamos does on the other hand stand in extreme closeness, or even "in contact" with foreign cultures. Although isolated Los Alamos was brought to life and sustained by prevailing international conditions. Or at least construals of international conditions, for it is important to remember also to emphasize a reflexive view of United States foreign policy while analyzing the

⁵² Simmel, "Metropolis," p. 331.

⁵³ Simmel, "Metropolis," p. 332.

history and conditions of Los Alamos. Too often the effect of U.S. policy on other countries is forgotten. Also, the domestic significance of international affairs decisions is often ignored. Exemplifying the first point it is plain to see that little or no attention is paid to the considerable role that the U.S. played in initiating and fueling the Cold War with the Soviet Union. Instead we are deluged by the inane phrase that the U.S. "won the Cold War" appearing in every publication from the most conservative to even the most critical of the U.S. weapons infrastructure. What this phrase means quite escapes me, except in that it shows a reckless and foolhardy historical sensibility. Either everyone won the Cold War, since no nuclear war was fought. Or, everyone lost the Cold War because it went on, two societies threatened each other and the world with genocide for forty-five years, and massive pollution and contamination has been caused in the building of tens of thousands of weapons. It is no wonder that the scene of two people (usually men) standing with guns drawn and pointing at each other in a standoff has recurred so frequently in the movies of the last years. I believe that this scene, played out over and over in the Hollywood consciousness, is a rendition of the situation of the cold war or the archetypical 'lose-lose' situation.⁵⁴

Here we recall the repulsion of which Simmel writes. The standoff situation is that of total distrust of the other and a ready willingness to kill them. It is on such a repulsive basis that Los Alamos was in contact with the culture of the Soviet Union. On the one hand the scientists in Los Alamos wanted to observe their Soviet counterparts carefully, to presage their next moves and to strive to keep

⁵⁴ The game theory so popular within strategic and security thinking is obsessed with analyzing and rehashing situations just such as this one.

and edge technologically—and a similar drive animates the fundamental fascination coupled with the vengeful hatred of the ‘terrorist’ today. But on the other hand, the continued *raison d’être* of the town was fundamental mistrust and fear of Soviet society, if not the outright desire to destroy it. Perhaps when some say that the U.S. won the Cold War they mean that it did succeed in destroying Soviet society. While the isolation of Los Alamos also met the stipulated criterion of isolation from urban areas in order to decrease public danger and defend against spying, it is also the case that the small and remote location of the town allows the kind of deep mistrust of the other which perpetuated the Cold War. Hence the history of Los Alamos is also one of tension filled relations with other communities in northern New Mexico.⁵⁵

Here we must consider Wen Ho Lee and how his treatment relates to these dynamics while at the same time noting other degrees of complexity which shade the situation. Clearly the treatment of Wen Ho, with its racist and xenophobic overtones, is exemplary of U.S. nationalism and a troubling retention of the model of enmity hewn to during the Cold War. If one listens to the rhetoric of the case, such as the discussion of “crown jewels of U.S. nuclear programs” and “changes in the global balance of power,” one can discern strong efforts to portray China as an enemy every bit as threatening as the Soviet Union once was considered to be. But in this case ancient sentiments of Orientalism in western culture have been tapped, as for instance when we hear FBI

⁵⁵ Hence in recent years the Los Alamos National Laboratory has been cited in a massive discrimination lawsuit claiming racism against Hispanic workers and in an ongoing battle with the New Mexico State Environmental Department which finds that the lab is in “substantial endangerment of public and environmental health.” LANL denies the racism and the contamination.

counterintelligence specialists testifying that the Chinese language has a unique predilection to coded messages and espionage.⁵⁶ Curiously, security obsessions about China have all-but disappeared in the current 'global war on terrorism' of which China is an avowed part.

On balance in Los Alamos it seems as if there was support for Dr. Lee, especially as the case dragged on and was shown to be more and more of a farce. Of course many citizens and laboratory employees were fearful to speak out either because of employment circumstances, security clearances, or ideology. Nonetheless, there was clear sentiment of support for him and there are those who were vociferous in advocating on his behalf. Several very sympathetic articles, letters, and editorials appeared in the *Los Alamos Monitor*, and the Laboratory Fellows, an elite group of those who are supposed to be the finest scientists at the laboratory, drafted letters of protest to his treatment. This support in Los Alamos seems to indicate that Lee was accepted into the narrow circle of small town life in Los Alamos. As a twenty year resident of the town, a U.S. citizen, the holder of a "Q" clearance, and a diligent scientist who also worked at Fermilab outside Chicago and at the Idaho National Engineering Laboratory before coming to Los Alamos, Lee and his family were accepted as members of the fold. To be sure there are those still living in paranoid fantasies of the fifties who believe the stories and see Lee as a serious and embarrassing breach in security. But for the most part Lee was strongly recognized and

⁵⁶ The previous two sentence contain elements from testimonies of witnesses at Wen Ho Lee's hearing on appeal of detention order (including conditions of solitary confinement, receiving no personal mail, and prohibition of speaking Chinese during 1-hour weekly family visits supervised by FBI agents.

claimed as a “citizen” of the town (Simmel discusses the citizen and the small-town like character of the Greek *polis*), and many government scientists have reacted to his treatment as arbitrary cruelty which could easily fall on them-- since, indeed, Lee’s only “crime” seems to have been to work with nuclear weapons and nuclear secrets. Of course I have my reservations about the job of designing nuclear weapons, but the treatment he received is nefarious. For the same government which hired him to design bombs to prosecute him for it is absurd.

Thus it seems that what went on with Dr. Lee came from other quarters, but was played out on the stage of Los Alamos. The Justice Department, including a huge portion of the FBI (at least eighty agents) as well as the Department of Energy were intent on putting Lee away. They spared no expense nor lie to try to achieve that end. It seems that behind their action there was the desire (or consequence) of establishing new external and internal boundaries. China as irridentist, China as evil. All Chinese-Americans (even Taiwanese-Americans like Lee) in the United States as potential spies, burrowed deep in the heart and heartland of America siphoning off priceless secrets. Even if Lee was supported in Los Alamos, Chinese-American scientists and engineers throughout industry and government reported closer supervision and greater mistrust on the job. As focal point of the drama and of the government action, there were numerous stories of foreign workers at Los Alamos (there in most cases by invitation, and of course with the proper passes and badges) being hassled and stigmatized.⁵⁷ It is said that not only Chinese workers but workers from India as well have been

⁵⁷ Information from interviews with scientists and research fellows at LANL.

subject to this new mistrust. After the Cold War and in a world which was said to be “multipolar,” where we were hearing constantly about globalization, definite efforts were being made to close off and compartmentalize the United States again. Recall resurgence of interest in SDI and ABM as exemplifying this closing motif. In fact it was furor over the false accusations about the W-88 warhead and Wen Ho Lee which led Congress to the re-allotment of \$11 billion to ABM efforts in Spring 1999. Today, less is heard in some quarters about this being a ‘multipolar’ world when some commentators propose instead that it is a ‘unipolar’ world dominated by the military might of the United States.

Of course the surge of anti-Asianism in the U.S., which has only continued and drawn in other groups after September 11, 2001, is foolhardy and damaging in that there are already so many people in the United States who are from Asia. Fomenting a mistrust of China or India in foreign policy sadly goes hand in hand with encouraging racism within the U.S. Here the U.S. seems to be taking after the Greek *polis* since “the incessant threat against its existence by enemies near and far brought about that stern cohesion in political and military matters, that supervision of the citizen by other citizens.”⁵⁸ Asian-Americans are already feeling the brunt of this supervision of citizens by other citizens. And, if Wen Ho Lee was indeed supported by so many in Los Alamos, it is partly because, having lived in the town for so long, he has been subject to this supervision and has “passed,” as it were.

The Stranger

⁵⁸ Simmel, “Metropolis,” p. 333.

Wen Ho Lee's scapegoating also points up many of the dimensions of "the stranger" as discussed by Simmel. He says that the sociological form of "the stranger" involves a mix of both attachment to and detachment from a given locale. The stranger, "has not quite got over the freedom of coming and going."⁵⁹ Thus much is being made of Lee's visiting China, even though it has been pointed out that these trips were approved by Los Alamos and involved carrying out Los Alamos business, in some cases even involving presidential orders to carry out lab to lab collaborations with Chinese weapons scientists.

The way in which the stranger occupies a contradictory position between nearness and farness is resonant with the discussion of repulsion and reserve above and it finds a correspondence in the way that Heidegger discusses spatial relations in the essay "The Thing."

Yet the frantic abolition of distances brings no nearness; for nearness does not consist in shortness of distance. What is least remote from us in point of distance, by virtue of its picture on film or its sound on the radio, can remain far from us. What is incalculably far from us in point of distance can be near to us. Short distance is not itself nearness. Nor is great distance remoteness.⁶⁰

Such it is that Los Alamos was both extremely close and vastly far away from the Soviet Union. As China was actively being portrayed as a comparable enemy, it was increasingly cast in the same light: an arch-enemy whom we nonetheless must keep the closest tabs on. And, true to the Heidegger quotation, we can indeed see many television images and hear radio sounds from China, but there

⁵⁹ Georg Simmel, "The Stranger," translated by Donald N. Levine in *Georg Simmel on Individuality and Social Forms: Selected Writings*, Levine, ed., Chicago, University of Chicago Press, 1971, p. 143, [originally "Der Fremde," in *Soziologie* (Munich and Leipzig: Duncker & Humbolt, 1908), pp. 658-91].

⁶⁰ Martin Heidegger, "The Thing," *Poetry, Language, Thought*, translated by Albert Hofstadter, New York, Harper and Row, 1971.

can also remain a remoteness to the place and the culture for us. I maintain that certain people and interests in the United States would like to exploit and encourage this remoteness, as also they would like to exploit the played-up remoteness between “American culture” and “Middle-Eastern culture” or “Islamic culture” (of course all of these terms are dangerously vague and expansive).

The description of the stranger by Simmel and the commentary on nearness and closeness by Heidegger both speak to the same kind of interstitial condition. The Wen Ho Lee case consists of an attempt to decipher the “closeness” of one already here, as the “distance” of one who owes allegiance to another country and who has betrayed the United States. Simmel says that the stranger “is fixed within a certain spatial circle--or within a group whose boundaries are analogous to spatial boundaries--but his position within it is fundamentally affected by the fact that he does not belong in it initially and that he brings qualities to it that are not and cannot be indigenous to it.”⁶¹ So Wen Ho Lee is the stranger. He “belongs” in Los Alamos as an engineer, and as a citizen of the U.S. But, he rubs up against the type of boundary that Simmel describes because he is not from a European background. His appearance, some of his practices, and the fact that he speaks Mandarin Chinese are reminders of this “foreignness.” In a multicultural America experiencing massive demographic changes, Lee’s case represents a stroke of reactionary eurocentrism. As a scientist Lee belongs in Los Alamos, but as Taiwanese he strains the WASPy model of the town.

Simmel’s consideration of the stranger becomes even more appropriate for thinking about the case of Lee. He maintains that, “The stranger is an element of

⁶¹ Simmel, “The Stranger,” p. 143.

the group itself, not unlike the poor and sundry 'inner enemies'--an element whose membership within the group involves both being outside it and confronting it."⁶² Through Wen Ho there is an attempt to push the stranger further into the category of the "inner enemy." Simmel explains how the stranger and the inner enemy function as social agents: "The following statements about the stranger are intended to suggest how factors of repulsion and distance work to create a form of being together, a form of union based on interaction."⁶³ Thus, in the same way that for Durkheim crime serves to reinforce social cohesion through the strengthening of norms, the stranger serves a productive function in bringing together and solidifying the union of social interaction. The "inner enemy" functions especially well in this way since it serves to foment a continual distrust and an ongoing mutual surveillance by members of a society—akin to the security condition in the Greek *polis* as described by Simmel. It is the sad fate of Wen Ho Lee, and now of hundreds of Muslim and Arab Americans, to have been cast in this role of the "inner enemy" who so troubles our national self-image.

⁶² Simmel, "The Stranger," p. 144.

⁶³ Simmel, "Stranger," p. 144.

Chapter 5

Ethnicity, Immigration, and Security

It bears keeping in mind that the kind of acceptance or suspicion of members of different ethnic groups in a national culture varies with time, is not necessarily subject to a continued improvement, and is deeply affected by the pursuit of national security and the definition of enemies to the nation. To repeat some considerations from the introduction: the nation is never discrete or set, and must be created and defined in an ongoing process. The trust or distrust of different ethnic groups is dependent, among other things, upon prevailing interpretations of world affairs and the associated threats or aids to U.S. interests. Thus Japanese Americans, who had been immigrating in large numbers before World War II, and many of whom had been here for generations, were all deemed to be public enemies during the war and were incarcerated in concentration camps for fear of their treachery. At that time Chinese were little-feared in the U.S. and actually experienced a greater degree of acceptance at the time of the Japanese internment. In fact it was during this time that the Chinese Exclusion Acts were finally repealed in 1943. As the Cold War grew in intensity, Russians began to take on the automatic aura of suspicion, until any of the few Russians visiting the U.S. were assumed to be either spies or happy refugees from Communism. During the 1950s, Jews bore the brunt of much of the anti-Communist and anti-Russian sentiment that was generated along with Cold War fears, as they were seen to be associated with Russia and to owe allegiance to the Soviet Union.

But, although the construal of external threats to the United States undoubtedly plays a prominent role in increasing or decreasing trust and acceptance of domestic ethnic populations, the dynamic is further complicated by racism which predates and influences the identification of these threats. As an example German Americans were not interned in World War II, undoubtedly because they were European Americans heavily involved in the history and immigration of the young nation and seen as 'indistinguishable' from other white Americans, despite the fact that German agents in the United States actually had carried out sabotage operations and biological warfare against livestock in World War I.⁶⁴ Indeed Executive Order 9066 authorizing Japanese internment declared that "the successful prosecution of the war requires every possible protection against espionage and against sabotage to national-defense materials, national-defense premises and national-defense utilities."⁶⁵ Furthermore, the U.S. Supreme Court decisions of *Plessy vs. Ferguson* (1896) and *Korematsu vs. U.S.* (1944) contain chilling legitimations of racial differentiation and repression. And, undoubtedly the crackdown on Paul Robeson, for instance, had partly to do with anti-Communism, but it proceeded from the base of good old-fashioned American racism, with the anti-Communism coming as something of an afterthought.

Korematsu v. U.S.

⁶⁴ See for example Jules Witcover, *Sabotage at Black Tom: Imperial Germany's Secret War in America 1914-1917*, Chapel Hill, Algonquin, 1989

⁶⁵ 7 Federal Register 1407.

The vital problem in *Korematsu*, which is related to the Lee case in terms of its concerns with national security and Asian American 'enemy' populations, comes in associating all Japanese Americans with a Japanese threat and treating them as potentially loyal citizens of the Japanese war machine. Even though Justice Black points out in the opinion of the court that, "It should be noted, to begin with, that all legal restrictions which curtail the civil rights of a single racial group are immediately suspect," and that "compulsory exclusion of large groups of citizens from their homes, except under circumstances of direst emergency and peril, is inconsistent with our basic governmental institutions," he goes on to uphold the exclusion and to underscore the supposed link between Japanese Americans and Japanese military threat.⁶⁶ In a frightening flourish in the last paragraph of the decision Black writes that:

Korematsu was not excluded from the Military Area because of hostility to him or his race. He was excluded because we are at war with the Japanese Empire, because the properly constituted military authorities feared an invasion of our West Coast and felt constrained to take proper security measures, because they decided that the military urgency of the situation demanded that all citizens of Japanese ancestry be segregated from the West Coast

Black's conclusion is frightening because of the way that it flows so seamlessly between the fate of Japanese Americans and the war against the Japanese Empire. Korematsu's treatment, like any Japanese American's, is justified by Black on the basis of association with the Japanese Empire. He even so much

⁶⁶ *Toyosaburo Korematsu v. United States*, 323 US 214 (1944)

as spells it out: *we are at war with the Japanese Empire, therefore Korematsu was excluded.*

That the *Korematsu* case was a crisis of ethnicity, loyalty, and American self-image is evident. It is an important decision as an historical precursor to the Lee case in that it posits an active and loyal link between Asian American populations and their 'countries of origin' and because it refuses to look at Asian Americans individually in terms of their loyalty but instead defaults to the standard of *possible guilt and treason* by members of the group in general. In explaining why the court did not invalidate exclusion and overturn Korematsu's conviction, Black relied upon the decision from the earlier Hirabayashi case in deeming that "...we cannot reject as unfounded the judgment of the military authorities and of Congress that there were disloyal members of that population, whose number and strength could not be precisely and quickly ascertained." Despite the caution that he emphasized against any general deprivation of the civil rights of an entire racial group, Black is quick enough to accept the general charge of possible disloyalty as a reason to do so. He tries to hedge by pointing out that most Japanese Americans are loyal, but still remains mired in the same charge of general disloyalty and threat:

Like curfew, exclusion of those of Japanese origin was deemed necessary because of the presence of an unascertained number of disloyal members of the group, most of whom we have no doubt were loyal to this country. It was because we could not reject the finding of the military authorities that it was impossible to bring about an immediate segregation of the disloyal from the loyal that we sustained the validity of the curfew order as applying to the whole group.

Even though some room is allowed that most Japanese Americans must be loyal to the United States, the inability to tell which and the dread of a serious threat from within are enough to justify the wholesale exclusion and incarceration of Japanese Americans. Note that the threat is represented by an *unascertained number* of these subversive citizens.

The dissenting opinions in *Korematsu* by Justices Roberts, Murphy and Jackson, which are notably much better reasoned and more precise than the opinion for the court, to say nothing of the way that they retain an ethic of social justice which the majority opinions by Black and Frankfurter flee from, make a number of damning points about the decision and the situation it bore on. Justice Murphy points out that no threat whatsoever was proven from Japanese American populations:

Moreover, there was no adequate proof that the Federal Bureau of Investigation and the military and naval intelligence services did not have the espionage and sabotage situation well in hand during this long period. Nor is there any denial of the fact that not one person of Japanese ancestry was accused or convicted of espionage or sabotage after Pearl Harbor while they were still free, a fact which is some evidence of the loyalty of the vast majority of these individuals and of the effectiveness of the established methods of combatting these evils.

If *not one person of Japanese ancestry* was accused of espionage or sabotage in the United States in the months prior to the exclusion, then clearly the standard of detaining the group in general because of individual threats is invalidated. And this is to assume that such a standard wouldn't be struck down as *prima facie*

unconstitutional and dangerous anyway. Justice Jackson pointed out that it would seem to fail such an initial review as,

A citizen's presence in the locality, however, was made a crime only if his parents were of Japanese birth. Had Korematsu been one of four—the others being, say, a German alien enemy, an Italian alien enemy, and a citizen of American-born ancestors, convicted of treason but out on parole—only Korematsu's presence would have violated the order. The difference between their innocence and his crime would result, not from anything he did, said, or thought, different than they, but only in that he was born of different racial stock.

Despite the fact that the stated reason for Executive Order 9066 and the subsequent military orders was to block espionage and sabotage, despite the fact that there were no known instances of Japanese American espionage and sabotage, and despite the knowledge that “Similar disloyal activities have been engaged in by many persons of German, Italian and even more pioneer stock in our country,” as Justice Murphy points out, Japanese internment and its subsequent upholding in the *Korematsu* decision proceed from a general distrust and suspicion of Japanese Americans. It is telling that this mistrust is so pronounced that it outweighs clearly that of (white) Italian and German Americans.

As a further indication of the racialization of the situation around exclusion, and as a refutation to the desperate needs for security cited by General DeWitt, who ordered the exclusion, and by the majority opinion, consider that not only was there no German or Italian American mass internment, but that the government actually took the time to conduct case by case review of these white

populations to determine loyalty. Justice Murphy found that “No adequate reason is given for the failure to treat these Japanese Americans on an individual basis by holding investigations and hearings to separate the loyal from the disloyal, as was done in the case of persons of German and Italian ancestry.” The double standard in treatment seems clearly to indicate that this was more a crisis of *domestic* uncertainty in US society about Japanese Americans than it was a generalized hysteria about national security, or at least that the construal of foreign threat became the catalyst for a number of responses that played off of domestic ethnic prejudice. To be sure the rhetoric of national security and the actions of national security institutions gave rise to the situation and produced some of its worst excesses, but the fundamental tension and uneasiness was one about the shape and picture of U.S. society in ethnic terms.

The rhetoric and racism of the statements from Lieutenant General DeWitt, the military commander of the Western Defense Command, which were part of the evidence considered and cited by the court, leave little doubt that racism against Japanese Americans, coupled with an unwillingness to distinguish them from Japanese or Asians in general, played a strong role in motivating Japanese internment and in its legitimation by the court. It was General DeWitt who issued the Public Promulgation No. 1 declaring that “the Pacific Coast is particularly subject to attack, to attempted invasion,” and the Exclusion Order 34 “providing that, after 12 o'clock May 8, 1942, all persons of Japanese ancestry, both alien and non-alien, were to be excluded from a described portion of Military Area No. 1” (Military Area No. 1 included the Pacific Coast and much of the Western

United States). Apparently the General was motivated to take these actions by his conviction that:

I don't want any of them (persons of Japanese ancestry) here. They are a dangerous element. There is no way to determine their loyalty. The west coast contains too many vital installations essential to the defense of the country to allow any Japanese on this coast. ... The danger of the Japanese was, and is now--if they are permitted to come back--espionage and sabotage. It makes no difference whether he is an American citizen, he is still a Japanese. American citizenship does not necessarily determine loyalty. ... But we must worry about the Japanese all the time until he is wiped off the map. Sabotage and espionage will make problems as long as he is allowed in this area. ...⁶⁷

While of course General DeWitt was charged with the difficult job of defending the Western U.S. during time of all-out war, this statement and others like it reveal that he was influenced primarily by a sense that Japanese were *always* foreigners and unable to become autochthonous Americans. Presumably he would not levy the same standard for European Americans. Indeed, the issue for him seems to be a genocidal one, inasmuch as his stated goal is that the Japanese be "wiped off the map." If Japan must be wiped off the map and Japanese Americans are held to be always loyal to Japan, it seems that this logic would require the permanent incarceration or the elimination of Japanese

⁶⁷ This segment of voluntary testimony from General DeWitt to the House Naval Affairs Subcommittee to Investigate Congested Areas is quoted (from 78th Congress, 1st Session, Part 3, pp. 739-740) in Justice Murphy's scathing dissent which opens with the lines, "This exclusion of 'all persons of Japanese ancestry, both alien and non-alien,' from the Pacific Coast area on a plea of military necessity in the absence of martial law ought not to be approved. Such exclusion goes over 'the very brink of constitutional power' and falls into the ugly abyss of racism."

Americans. It is in this respect that Justice Murphy commented that this decision bore on fundamental issues of democracy, justice, and tolerance:

But to infer that examples of individual disloyalty prove group disloyalty and justify discriminatory action against the entire group is to deny that under our system of law individual guilt is the sole basis for deprivation of rights. Moreover, this inference, which is at the very heart of the evacuation orders, has been used in support of the abhorrent and despicable treatment of minority groups by the dictatorial tyrannies which this nation is now pledged to destroy. To give constitutional sanction to that inference in this case, however well-intentioned may have been the military command on the Pacific Coast, is to adopt one of the cruelest of the rationales used by our enemies to destroy the dignity of the individual and to encourage and open the door to discriminatory actions against other minority groups in the passions of tomorrow.

For the dissenting opinions in the court, there was no doubt whatever that the *Korematsu* decision was based on disastrous principles which would imperil the future course of American democracy. General group discriminatory action seemed to them to be inconsistent with U.S. law and dangerous for a society based upon immigration and internal migration. Crucial for these justices was the fact that all Americans are linked to a foreign land or nation, whether it be European, African, Asian, or Native American. We might observe analytically here that the key test for the dissenting justices was *autochthony* and the importance of not casting some groups of immigrant Americans as natural and native to the land while holding other groups to be permanent foreigners regardless of birth status, naturalization and length of habitation.

A shocking legal precedent, sadly still motivating U.S. security policy, was set in *Korematsu* which sanctioned the general suspicion of minority groups based

on their perceived nationality. This standard pushes aside analysis or evaluation of the sociology of U.S. society and refuses to consider the linkages between attitudes in foreign affairs and in domestic life. Rather this standard validates the general suspicion of immigrant groups based on race, nationality, or religion. Thus Muslim Americans and immigrants from Pakistan, Saudi Arabia, Yemen, Egypt, and a number of other Islamic countries have borne the brunt of recent security measures in the United States. Secret deportations and special registration again proceeded from a principle of *group disloyalty*. It is not any characteristic of individual loyalty or citizenship that matters, but point of origin and membership in a group deemed to be dangerous. It was just this kind of general, heavyhanded, and racist thinking that the dissenting justices abhorred. Data about assimilation, cultural practices and group life in the United States are rendered irrelevant when absolute standards of security and threat (like 'espionage and sabotage' or 'terrorism') are pushed to the fore and motivate state actions and policies. Justice Murphy concludes his opinion by pointing out that "All residents of this nation are kin in some way by blood or culture to a foreign land. Yet they are primarily and necessarily a part of the new and distinct civilization of the United States. They must accordingly be treated at all times as the heirs of the American experiment and as entitled to all the rights and freedoms guaranteed by the Constitution." He indicates that immigration and equal protection of the law are central elements of U.S. nationhood, even as he warns against ongoing identification of immigrant groups with their foreign origin. His statement also indicates that he saw how issues of national security were

consistently and causally linked with immigration and immigrant groups in the United States.⁶⁸

Chinese and Taiwanese Americans in Scientific Industry

For Wen Ho Lee and for other Taiwanese and Chinese American members of the scientific establishment, the situation is complicated indeed. Chinese have been in the United States, and in New Mexico, for centuries, yet there has at times been significant resentment and refusal of them. Chinese are the only ethnic group ever to be specifically banned from United States immigration, in the Chinese Exclusion Acts. According to labor and political vicissitudes, Chinese have alternately been welcomed or barred from the United States. Undergirding the Chinese Exclusion Acts and the fear about Chinese immigration was undoubtedly a deep-seated and ancient European distrust and fear of China. Often called the fear of the Yellow Peril, it seems that this concern that Chinese would overwhelm the population of the United States motivated the closing of the borders to Chinese.

During the Cold War the situation for Chinese immigrants and Chinese Americans was a contradictory one. On the one hand the PRC remained communist and was seen as a threat to the United States' way of life. The two

⁶⁸ There is also a vibrant history of association of disease outbreaks with immigrant groups, such as the associations of Haitians and HIV, Italians with Polio, Irish and Tuberculosis. See Ananya Mukherjea, "Stopping AIDS at the Border: the epidemiology of infectious disease outbreaks," in *Radical Society*, Volume 30, no 2, July 2003.

countries fought openly in the Korean War, and many U.S. politicians had advocated the nuclear attack of China. On the other hand, the primary Cold War enemy, and the primary communist threat, was the Soviet Union. According to the American doctrine of communism, the U.S.S.R. and the PRC should have been functioning in tandem or under singular guidance by a World Politburo. However, in fact the relations between China and the Soviets was often quite antagonistic, and they frequently seemed to treat one another as strategic enemies. Thus at times during the Cold War in the United States, such as during the 1970s and 1980s, when Wen Ho Lee started to work in national laboratories, Chinese seemed more integrated into U.S. society than some Russians did. And in addition there was a Cold War assumption that naturally people would rather live the capitalist west than in a communist nation, and refugee immigration status could be granted for anyone emigrating from Communism.

In 1965 the immigration laws of the United States were re-codified to become less privileging of European origin and more desirous of technical qualifications, officially setting in place a trend that had already been underway, and a major shift in national demographics began. Immigration from Asia increased dramatically, and many young migrants like Wen Ho Lee sought their futures and opportunities in the United States. As a young engineering student who had graduated with very high marks in mechanical engineering from National Cheng Kung University, Lee was allowed to come to the U.S. to pursue a PhD in mechanical engineering at Texas A&M University in 1963 which he would finish in 1969, after which he moved to New Jersey. His work with using computer

codes to solve problems in hydrodynamics was very cutting edge at the time, and it set him up well for a career in the study of nuclear processes in reactors and in nuclear detonations. Ever since his undergraduate schooling at National Cheng Kung he had been fascinated by the use of mathematical methods to describe fluid flow and interaction. To this day he speaks very fondly of the Lagrangian and Eulerian methods that he was introduced to at that time and that he has worked with over the last forty years.

As a well-qualified technical immigrant who continued his education and developed his technical acumen in the United States, Lee was well-suited to find scientific work in the United States. After grad school he worked in studying pollution dispersion related to nuclear power plants in the air and water. When he became a U.S. citizen in 1974, he was eligible to work for the national laboratories. Starting in 1975 he first worked for the Idaho National Engineering and Environmental Laboratory, doing more work on computer codes relating to reactor safety. In 1977 he went to Argonne National Laboratory in Chicago and in 1978 he was hired by Los Alamos. In 1980 he made the switch from reactor computer codes to weapons codes when he became part of the X Division, Applied Theoretical Physics, at LANL. His background investigation was completed and he was granted a 'Q' clearance enabling him to work with Secret Restricted Data, Formerly Restricted Data and Nuclear Weapons Design Information. He had become a member of the weaponeer's club and he was trusted with the state secrets of the nation.

But in the end Lee would doubt the degree to which he was ever fully integrated into the national security infrastructure, that he could be subjected to the kind of portrayal and treatment that he was on the basis of outright racial profiling.

Enormous national security bureaucracies which had been built up and focused on the Soviets as the big strategic threat were now turning their gazes elsewhere, and asking themselves where the next such worldly threat to U.S. hegemony would come from. Lee was unlucky to live through a time when it was China that again was being actively depicted as a communist strategic threat against the United States. And, looked at in another way, We will have occasion in a later section to look more at the process by which the security bureaucracies of the United States function by identifying, defining, and opposing perceived strategic threats to the nation. Competition and enmity are assumed, it is not a question of *if* there are threats, but *where* they are. These agencies with tremendous budgets and tremendous technologies nonetheless *need* their enemies in order to continue the dance.

Even though he was born in Taiwan and is Taiwanese-American, Lee would become the scapegoat when the hysteria started to fly around Washington (and New York) about the notion that the PRC had 'stolen' the design of the W-88 warhead and had produced an exact replica. The inflammatory Cox Report, which was clearly advocating for a policy of military-strategic competition with the PRC, describes a situation where the Chinese have stolen the contents, the barn, and the barn door of U.S. technology. The exaggerated report goes on to

list sectors of technology like rockets and missiles, supercomputers, personal computers, nuclear weapons, surveillance, and virtually every possibly militarily-related technology, and to claim that the Chinese had made off with the goods in all these areas. Lee became the personification of the 'army of Chinese spies' that Department of Energy security briefings warned about. When it was taken for granted, although it would later be disproven, that China had stolen all this proprietary knowledge from the U.S., Lee became the representative for this theft in the judicial and in the public eye. We now know that these claims of technological theft were wildly exaggerated, and that they were put forward primarily to advocate a military and confrontational stance with the PRC and the continued design and production of nuclear weapons in the United States. We also know that, even among the list of possible suspects for a W-88 leak, many likely suspects were skipped over in order to focus on a very unlikely suspect, Wen Ho Lee, who was singled out only on the basis of his perceived ethnicity. Among a list of any scientists who had been to China, and who had knowledge of the W-88, a number of others were much more likely to have leaked information. Yet, as these other scientists were white, they remained unscrutinized, even though prominent counterintelligence officials have repeatedly maintained that Chinese Ministry of State Security doesn't especially target ethnic Chinese Americans, but any American of any ethnicity that they think has had access to the technology or information that they are interested in. Thus there was a twofold panic about China in this case. First, there was the panic about the

information that China supposedly stole. And, second, there was the focus on a perceived Chinese-American, undoubtedly still loyal to China, as the culprit.

Comparative Considerations on Security and Ethnicity in France⁶⁹

The Dreyfus Affair of the 1890s is parallel to the case of Wen Ho Lee in many ways. As a French Jewish officer in the French Army, Captain Dreyfus was at once within the corridors of power of the French State and he was a stranger in French society.⁷⁰ He was born and raised and educated in France, but he still was not subject to a complete acceptance, and his story is replete with other army officers and politicians who were suspicious of him as a Jew and who were opposed to the presence of a Jew on the Army General Staff. In a crisis about French national security, in which crucial military secrets were said to have been lost to Germany, the real firestorm emerged around the issue of Dreyfus' Jewishness, and whether Jews in general were a group that was incompatible with French nation. It was only a few decades later that the Vichy government of

⁶⁹ Information for this section comes from historical research on French security and French empire as well as from a series of interviews with French Africans in Paris. Some of these were of Moroccan origin, some from Algeria, and others from Senegal and Côté d'Ivoire.

⁷⁰ For coverage of the Dreyfus Affair see Jean-Denis Bredin, *l'Affaire*, Paris, Julliard, 1983; Octave Mirbeau, *l'Affaire Dreyfus*, Paris, Séguier, 1991; Paschal Grousset, *L'affaire Dreyfus et ses ressorts secrets: précis historique*, Paris, Société d'éditions illustrées, 1898-99; Douglas Johnson, *France and the Dreyfus Affair*, London, Blandford, 1966; Michel Leymarie, ed., *La Postérité de l'Affaire Dreyfus*, Villeneuve d'Ascq : Presses Universitaires du Septentrion, 1998.

France would be fully complicit with the displacement, deportation and the execution of French Jews. Played out in the Dreyfus Affair was clearly a social process of defining the inclusion or the exclusion of Jews. Dreyfus himself shows that there was a significant ambiguity and doubt as to whether Jews could be trusted in the central nodes of power in the French state.

In France, where there is a parallel obsession with national security to that of the United States, along with the presence of a large and active security state, it is domestic security and the problems of ethnicities that animate discussions about safety. This domestic security and the threat which is said to come from North Africans and Central Africans, is the perennial hot-button issue for conservative campaigns in France. The issue of domestic security and public safety was seemingly the main source of the marked rightward shift in the recent French elections. Certainly Chirac is dedicated to the hard-line anti-immigrant and racist security policy of the French right, but it even seemed for a time that Chirac would be overwhelmed in the election of Jean-Marie Le Pen himself, the very personification of the ultranationalist, anti-immigrant, racist, and anti-semitic right. As a sociological process of continuing to define the constituency of the French nation, it is worthwhile noting that the main ethnic groups affected are the Jews, subject of longstanding tension and ambiguity in French society and victims of the Vichy regime, as well as French Africans who are part of the still very much unresolved French legacy of colonialism. This era of French colonialism ended only very recently in a historical sense (if we may even say that it ended at all given the amount of remaining French military and diplomatic

influence in Africa and the South Pacific), with the War of Algeria a somewhat recent affair which, like the Vietnam War in the United States, is only just starting to be evaluated in a truly historical and critical light. It is evident that the legacy and the consequences of French colonialism and the mass movements of populations that it entailed remain very open and profound areas of influence on the construal of French society itself, and the 'proper' constitution of the French nation.

Controversies about the building of mosques, about rates of immigration, and about 'les Africains dans les banlieues' all show the racial tension of French society and the way that ethnicity is used inevitably as a part of the discourse of security and social integrity. On the one hand, this is about the relative acceptance of different groups in French society. On the other hand, as with the issue of Chinese or Muslims in the United States, the question is a somewhat moot one since these populations are such a *de facto* presence. While there is certainly tension about Algerians and Moroccans in France, and there are recriminations about Islam, it must be borne in mind that the number of North Africans who are French citizens amounts to a fifth of the total population of France. So, while the campaigns and the crises about immigration are not as much about whether these people will be wholesale accepted within or rejected from France, they are certainly part of an ongoing process by which French society is articulating its ethnic self-image and its concept of nation. Of course a few centuries ago, the French notion of nation was predicated upon a tie to the land and a proper Frenchness. As a result of colonialism and population

exchange, the very notion of nationality and nationhood has been affected from its central assumptions outward.

If Durkheim, within this French society (but also understanding its ethnic ambiguity as a Jew), could treat crime as an integral part of the way that society comes to terms with and represents itself, even in the way that norms and rules are shaped, then certainly it behooves us to look at security crises and supposed security breaches as parallel instances of the way that society represents itself and serves to try to draw boundaries of an entity which is notably fluid. Crises about security are productive phenomena in which a society dramatically frames the issues of loyalty, belonging and ethnicity. In these prominent events, ancient and persistent racism and xenophobia are made evident even as they are repackaged and reinvigorated. Questions about the supposed integrity of the land or the population immediately become questions about who belongs and who does not. Whether or not someone is trusted in strategic positions within a society based on their ethnicity alone is a strong index of the degree to which members of that ethnic group are tolerated and accepted (of course, if someone is trusted on the basis of their ethnicity alone, then it is likely to be more difficult to perceive, as it would be 'invisible' through seeming normal or uncontroversial). As with Captain Dreyfus and with Wen Ho Lee, if there is a lingering and pointed mistrust based solely on whom they are perceived to be, Jewish or Chinese, then there is a strong ambiguity about these groups vis-à-vis the larger society, and their cases stand in for a much wider social process which they in turn affect.

Chapter 6

Colonial History of New Mexico

What is now called New Mexico has been subject to a triple colonialism, the legacy of which is still very much part of the everyday personal and political life of the state. The division of power and of land, the languages spoken, and the dress and cultural life of the state are all influenced by one or more of these histories of colonialism and the implications for geography and social life that they have.⁷¹ If we wish to evaluate matters of ethnicity, nation and national security which pertain to Wen Ho Lee, we must look at this unique area of the Southwestern U.S. where the controversy arose. It is hardly an empty desert, but a striking landscape long-inhabited and contested over several thousand years. The story of Lee does not emerge from a controlled laboratory, but from a region with its own intense and ongoing history of ethnic interaction and of negotiation of the process of national identification. Lee's saga emerges from a small, middle-class, mostly-white enclave in the midst of an area of endemic poverty with a number of Native American Indian pueblos and reservations and Mexican-Spanish towns. Some of the closest towns to Los Alamos are San Ildefonso Pueblo, Santa Clara Pueblo and Jemez Pueblo, three Native American pueblos descended from the Anasazi Indians who had lived in the area for some time, and Española, near the seat of the Spanish Colonial administration from 1598 to 1610 at Ohke (San Juan de los Caballeros) and at San Gabriel de Yunque at the site of an old Pueblo village at the confluence of the Rio Grande

⁷¹ See, for instance, Ruth W. Armstrong, *New Mexico, from Arrowhead to Atom*, South Brunswick, A.S. Barnes, 1976.

and the Rio Chama (Yungueingge). Languages spoken along with English in New Mexico include Tewa, Navajo, and Spanish, Jemez (Hemish, Towa), Keres, Zuni , and Tiwa.

It is difficult to know for certain when they came, but humans have been living in what is now New Mexico for at least 10,000 years, and likely back to 30,000 years ago. Archaeological digs at Clovis, for example show that human habitation extends back at least that far. Clovis and Folsom cultures left ample evidence of their thriving in the east and the northeast of the state around 10,000 years ago. Agrarian cultures growing maïs, squash, beans, and chile have existed, especially along the Rio Grande and the Colorado Rivers, for some time. Later waves of more nomadic Athapascan Indians clashed with these agrarian cultures and pushed them into the cliffs and onto the mesa tops for dwelling in secure locations that are now so familiar in locations like Acoma, Puye Cliffs and Chaco Cañon. Although this struggle continued before Spanish colonization, the absorption of some new nomadic populations and the force of time gave rise to Pueblo culture along the Rio Grande in what is now New Mexico and Colorado. Although these peoples did hunt, they are known for their farming and irrigation techniques and for their pottery and weaving.

Spanish Colonization

The first wave of colonization in the area, aside from the previous and often warlike migrations of Native American groups from north and northeast, came at the hands of the Spanish who sent teams to reconnoiter the desert and the

mountains of far northern Mexico in search of gold or other valuable materials, or who simply were shipwrecked and who set off across this territory.⁷² 'Explorers' like Cortez, Oñate, de Vargas and Coronado, the heroic exploits of whom are still taught religiously in New Mexico schools, came into this territory, which they called the 'Neuva Tierra,' to claim it for the Spanish crown. Coronado led the first major *entrada* in 1540. Others would follow in the coming decades.⁷³ By 1598 Oñate set up the territorial capitol at San Juan. There are still those in New Mexico today who swear allegiance to Spain, and who revere King Phillip who sat on the throne at the time that Spain claimed this land. At first the Spanish were searching for gold and other precious metals, but they were also evaluating the land for colonial control and administration.⁷⁴ They would soon attempt to

⁷² See the first account of Spanish exploration in, *The journey of Alvar Nuñez Cabeza de Vaca and his companions from Florida to the Pacific, 1528-1536*; translated from his own narrative by Fanny Bandelier, together with the report of Father Marcos of Nizza and a letter from the Viceroy Mendoza; ed., with an introduction, by Ad. F. Bandelier, New York, A.S. Barnes & Company, 1905.

⁷³ See *New Mexico. Otherwise, the voiage of Anthony of Espejo, who in the yeare 1583. with his company, discovered a lande of 15. prouinces, replenished with townes and villages, with houses of 4. or 5. stories height, it lieth northward, and some suppose that the same way men may by places inhabited go to the lande Tearmed De Labrador. Translated out of the Spanish copie printed first at Madrael, 1586. and afterward at Paris, in the same yeare. Imprinted at London for Thomas Cadman. [1587]*, Lancaster, Pa., Lancaster press, inc., 1928. Other historically-important documents include *Relacion del descrbimiento [sic] del Nvovo Mexico: y de otras muchas prouincias, y ciudades halladas de nueuo; venida de las Indias, à España, y de alli mandada à Roma a Io. de Montoya*, En Roma, Por B. Bonfadino, 1602.

⁷⁴ On these matters see Adolph F. Bandelier, *Découverte du Nouveau-Mexique, par le moine franciscain frère Marcos, de Nice en 1539*, translated from the French and edited, with introd. and notes by Madeleine Turrell Rodack, Tucson, University of Arizona Press, 1981. And, the claim-staking Antonio de Espejo, *Histoire Des Terres Nouvellement Descouvertes, Avsquelles a esté ja trouué quinze belles Prouinces remplies de villes & villages: ausquelles Prouinces il se trouue grandes commoditez, & abondance de diuerses especes metalliques: lesquelles terres ont esté descouuertes par Antonio de Espejo & nommees le nouueau Mexico*. Traduit de l'Espagnol en langue françoise, par M. Basanier, À Paris, Chez la vefue Nicolas Roffet, 1586.

control both the land and the people in an imperial regime designed to deliver wealth to Spain. The Spanish conquerors, or Conquistadores, displaced a number of Indian towns and villages in order to claim the land and to enslave the people. Meanwhile, Catholic missionaries spread the Word of God and attempted to gain converts among the native populations.⁷⁵ This practice led to a characteristic trait found frequently in Latin American Catholicism (and even in Roman Catholicism itself at root) in which other deities and forces, those drawn from the 'pagan' beliefs of the converts, are integrated into the Catholic panoply as saints. Thus the Catholicism which was imported and impressed upon the locals was also transformed in the process and gave rise to a number of distinct groups and belief systems. The *Penitentes* of northern New Mexico portrayed by Aldous Huxley in *Brave New World* still perform their rituals of self-laceration and their long pilgrimages and rituals and dances. The 'Savage Reservation' in *Brave New World* is a part of northern New Mexico encompassing San Ildefonso and Santa Clara Pueblos, what is now Los Alamos, and much of the Rio Grande Valley and Jemez Mountains.

Under the Spanish colonial system a mercantile economy of extraction was set up to bring resources to Spain and taxes to the Spanish administrators and landowners. Despite the legend of the Seven Cities of Gold, most likely referring to the glint of the adobe structures of the Pueblos under the shine of the desert sun, gold was not found in great quantities at this time. But silver and copper

⁷⁵ See Adolph Francis Alphonse Bandelier, *A history of the Southwest; a study of the civilization and conversion of the Indians in Southwestern United States and Northwestern Mexico from the earliest times to 1700*, Ed. by Ernest J. Burrus, Rome, Jesuit Historical Institute; St. Louis. St. Louis University, 1969.

were both found in the area, and the turquoise long mined and valued by the Indians began to be valued by the Europeans and sold along with other precious metals and stones. Nonetheless, the remoteness of the territory and the difficulty of travel blocked much development of mining until centuries later. Ranching and farming also became large elements of the Spanish administration of the territory, which allowed both control of land and a return on profit. A number of land and mining claims date back to this era, and the land and resource owning families of the region, such as the De Baca family which had owned much of the land around Los Alamos, trace their claims directly back to Spanish rule. Attempts to derive profits from the territory led to theft from, and exorbitant taxing of, the Indian populations. A desire to keep the Spanish colonials stocked with food and with craft goods to trade resulted in demanding increasing tithes from the Indians.

Much of the Spanish colonial period of New Mexico is characterized by extreme cruelty in the repression of the Indians. To this end there are accounts of the burning and killing of hundreds of Indians at a time, the burning and destruction of villages, enslavement, and harsh symbolic punishments like the mass cutting off of hands or feet, and the systematic seizure of food and goods. In 1620 the Spanish Inquisition was instituted in New Mexico, with the outlawing and the draconian punishment of native religious practices. Local *padres*, Catholic missionary priests, seeking to convert Indians, often totally rejected native beliefs and described them as the work of the devil. Not only was ceremonial practice of native religious practices criminalized, there were also

frequent trials for witchcraft which targeted native beliefs, as accusations of witchcraft were a way quite literally to demonize the Indian religions. Ceremonial floggings and other mass punishments were meted out in this repression. The lack of expected gold and the avarice of the Spanish for mercantile goods and contributions to the church reinforced the practice of enslaving many Indians.⁷⁶

The harsh economic extraction attempted in this early colonial period and the general repression of native life and religion prompted a successful revolt, the Pueblo Revolt of 1680, in which a number of united Pueblos, led by Taos Pueblo, rose up simultaneously and killed hundreds of Spanish priests, soldiers, and settlers. The remaining Spanish population either was killed or fled to a stronghold in El Paso, several hundred miles southeast. The Spanish forces and colonizers were completely driven out of Northern Mexico, what is now New Mexico.⁷⁷ For some 12 years the Pueblos and other Indians in Northern Mexico went about their affairs and had self-rule, until a successful attack by forces under Don Diego de Vargas, working in allegiance with the Pecos Pueblo, later destroyed in vindication by other pueblos, reestablished Spanish colonial rule of

⁷⁶ On these practices see David E. Stannard, *American Holocaust: Columbus and the Conquest of the New World*, New York, Oxford University Press, 1992, and Ward Churchill, *A Little Matter of Genocide: Holocaust and Denial in the Americas 1492 to the Present*, San Francisco, City Lights, 1997.

⁷⁷ Franklin Folsom, *Red Power on the Rio Grande: the Pueblo Revolt of 1680*, Albuquerque, University of New Mexico Press, 1996; Andrew L. Knaut, *The Pueblo Revolt of 1680 : conquest and resistance in seventeenth-century New Mexico*, Norman, University of Oklahoma Press, 1995; Robert Silverberg, *The Pueblo Revolt*, New York, Weybright and Talley, 1970; and *Archaeologies of the Pueblo Revolt : identity, meaning, and renewal in the Pueblo world*, ed. Robert W. Preucel, Albuquerque, University of New Mexico Press, 2002.

the territory.⁷⁸ De Vargas is now the namesake of a shopping mall in Santa Fe, while Coronado's name graces an Albuquerque mall. It seems somehow appropriate that these conquerors who opened up the territory for mercantile capitalism later lent their names to the preeminent symbols of material consumption.

During the second period of Spanish rule, however, the Spanish colonial administration, fearing the possibility of another revolt, established greater tolerance of Indian religions and social life, and avoided the mass killing and symbolic torture they had practiced before. At the time, Northern Mexico was remote in the Spanish Empire, and cut off from ready sources of communication and support. As there was no rail technology yet, and all travel of the hundreds of miles between Santa Fe and other Spanish colonial centers further south, such as El Paso del Norte, was with horses, there was no major movement of material or goods between them. Thus, in this second Spanish Colonial Period from 1692 until 1821, the Spanish and Pueblo Indian cultures of New Mexico increased their mutual tolerance and interaction. Spanish colonists relied on Pueblo assistance in farming and in survival, and both groups faced threats from the nomadic Navajo, Comanche, and Apache raiders. Historians of New Mexico tribute this period as being the most crucial in the generation of the distinctive Mestizo culture of the state, where many residents have both Spanish, or

⁷⁸ See *The Mercurio volante of Don Carlos de Sigüenza y Góngora; an account of the first expedition of Don Diego de Vargas into New Mexico in 1692*; translated, with introduction and notes, by Irving Albert Leonard, Los Angeles, The Quivira Society, 1932.

Mexican, and Indian heritage, and where cultural traditions and beliefs became fused.

Most of the Pueblos became Catholic at this time, and remain so, but it is a highly syncretic form of Catholicism in which Pueblo customs like the Deer Dance or the Eagle Dance have been integrated into the religious practice while Indian deities and ancestors have been added into the holy panoply. Pueblo feast days and Catholic saints' days are celebrated together with a combination of costume and tradition. The so-called Spanish Catholics of New Mexico practice a form of the religion which is markedly influenced by this mixed heritage and which bears less resemblance to Catholic rituals in Spain proper. The cultural, economic, and social mixing of Pueblos and Spanish continued throughout the 18th century as New Mexico developed a new integrated culture of its own.

New Mexico also has a longstanding Jewish heritage as Sephardic Jews came here, mostly under the cover of strict secrecy and masquerade, during the Spanish colonial period. North Africans, including Estebanico who seems to have spread the myth of the Seven Cities of Gold, were among the first Spanish to travel through this land in the late 1500s. It is said that North Africans brought aqueduct technology to New Mexico during the Spanish rule.

American Colonization

In 1807 Zebulon Pike, 'discoverer' of Pikes' Peak led the first United States expedition to New Mexico and back. In 1821 Mexico declared independence

from Spain, and then there was a brief period of Mexican rule of New Mexico from 1821 until 1846. During this time border controls and restrictions on immigration from the U.S. were lessened, and more U.S. citizens began to make their way there.⁷⁹ In 1846 General Steven Watts Kearney announced the annexation of New Mexico into the United States and began the Mexican-American War.⁸⁰ In February of 1848 the war ended with the treaty of Guadalupe-Hidalgo between Mexico and the United States. The Treaty allowed New Mexicans of Spanish or Mexican ethnicity to continue living in New Mexico, to retain all their property holdings, and to decide their nationality, Mexican or American. The Treaty under this heading thus includes substantial protection for the land grants of the Spanish to the Indian Pueblos. The treaty stipulates that all Mexicans residing in New Mexico would retain all their land holdings under U.S. rule. As such it has been used as a legal defense against encroachment on Indian lands by the U.S. federal government.⁸¹

In 1850 New Mexico, which included most of the present-day Southwestern United States, was designated as a territory of the United States. During the American territorial rule, something of a return to the harsh anti-Indian policies of the early Spanish colonial period was seen. Indians were displaced and their land annexed, despite the Treaty of Guadalupe-Hidalgo, and nomadic Indian

⁷⁹ Sister Mary Loyola, *The American Occupation of New Mexico 1821-1852*, Albuquerque, University of New Mexico Press, 1939.

⁸⁰ John Millin Selby, *The Eagle and the Serpent: the Spanish and American Invasions of Mexico: 1519-1846*, London, Hamilton, 1978; Richard Francaviglia and Douglas W. Richmond, ed., *Dueling Eagles: Reinterpreting the U.S.-Mexican War*, Fort Worth, Texas Christian University Press, 2000; and Orlando Martinez, *The Great Landgrab: the Mexican-American War 1846-1848*, London, Quartet, 1975.

⁸¹ E.g., Francis Paul Prucha, *Documents of United States Indian Policy*, 2nd Edition, Expanded, Lincoln, University of Nebraska Press, 1990, p. 158.

populations started to be fixed and confined. Nomadic Indian raiding continued, especially by Apaches, and was augmented by their resentment at the imprisonment and punishment of Indians being practiced by the Territorial government. In the 'Long Walk' of the 1860s an attempt was made to relocate all Apaches and Navajos to Bosque Redondo. The attempt was abandoned and they were allowed to return to their lands after thousands died of disease and starvation. In 1886 Geronimo was finally captured, and this represented the fixing of the last nomadic Indians who had been holding out.⁸² With the Indian problem set in order, accomplished through expropriation, internment in concentration camps (reservations), and mass murder, New Mexico would be ready to join the United States as the 47th member in 1912. Between the Spanish and United States' colonization of New Mexico, Pueblo Indian villages and towns there had decreased from 100 spread throughout the state to 19.

In the 1870s the railroad arrived in New Mexico and began to make it less remote. More immigration from the United States began, and it was easier to transport goods and resources. There was a renewed interest in the extraction of precious materials, and with the discovery of gold and silver and copper in mountain deposits, mining in New Mexico grew. Ranching, too, benefited from rail transport as greater volume and greater profits were supported by shipping cattle eastward. Lumber industries also grew in the states' many alpine forests. Where it had largely disappointed the Spanish as a mercantile province with the

⁸² Veronica E. Velarde Tiller, *The Jicarilla Apache tribe : a history, 1846-1970*, Lincoln, University of Nebraska Press, 1983.

failure to find the Seven Cities of Gold, the Territory of New Mexico proved more valuable in terms of resources and raw materials for the United States.⁸³

Radioactive Colonization

Those same industries were the mainstay of New Mexico economic life in the first half of the twentieth century. With the U.S. entrance into World War II, the economic and security footing of New Mexico changed dramatically. While still remote from centers of power in the U.S., the state became the location of a number of key elements of U.S. power. In particular, many of the sites of nuclear age development and testing were located on Indian lands. Ward Churchill calls this *radioactive colonization* and Valerie Kuletz refers to it as *nuclear colonialism*.⁸⁴

The atomic bomb was developed on the Pajarito Plateau in Los Alamos, on land which had been expropriated from Spanish farmers and a boys ranch school, and tested at Trinity Site on former Mescalero Apache land in southern New Mexico, and many of the institutions relating to weapons development and

⁸³ Frank D. Reeve, *A History of New Mexico*, New York, Lewis Historical Publishing, 1961, and L. Bradford Prince, *A Concise History of New Mexico*, Cedar Rapids, The Torch Press, 1912.

⁸⁴ Ward Churchill, *Struggle for the Land : Indigenous Resistance to Genocide, Ecocide, and Expropriation in Contemporary North America*, San Francisco, City Lights, 2002 [originally Monroe, Me., Common Courage Press, 1993]. Valerie Kuletz, *The Tainted Desert: Environmental and Social Ruin in the American West*, New York, Routledge, 1998.

design stayed in business after the War and up to today. The small state with just a handful of people in its vast stretches became the site of two of the National Weapons Laboratories, a major Army proving ground, and three key air bases. Soon one of these bases at Roswell would be closed, but three other major Cold War bases housed fighters, strategic bombers, and weapons research. Today still the F-117 Stealth fighters, much used and celebrated in the last decade and a half of U.S. conflicts, are based in New Mexico. From 1950 on Uranium was discovered near Grants and Gallup New Mexico and on the Navajo and Laguna reservation. This would begin a despicable period during which Navajos and Lagunas would be hired to mine the Uranium with inadequate safety measures. Hundreds of miners have died of cancer related to the exposure.⁸⁵ Radioactive contamination of a number of areas also resulted from the unsafe mining. This military and radioactive influence on the state since the war is the third major colonial element which acts on the land and the society of New Mexico.⁸⁶

Several nuclear detonations have taken place here, including the above-ground test in July 1945. The White Sands Missile Range and its precursor the Alamogordo Bombing Range have been the sites for the testing and firing of hundreds of weapons, Uranium mining has both exposed workers to radioactivity and released radioactive and chemical waste downstream in water and dust,

⁸⁵ On the mining and the health consequences see Ward Churchill, *Struggle for the Land*, chapter on 'Geographies of Sacrifice,' and *A Little Matter of Genocide*, chapter on 'Radioactive Colonization,' as well as Stewart L. Udall, *The Myths of August*, chapter 9 'The Betrayal of the Uranium Miners.'

⁸⁶ See also Donald A. Grinde and Bruce E. Johansen, *Ecocide of Native America: Environmental Destruction of Indian Lands and Peoples*, Santa Fe, Clear Light, 1995.

Kirtland Air Force Base and Sandia National Laboratory developed a massive facility for generating electromagnetic pulse to simulate a nuclear blast and test avionics, then became the storage and staging center for the vast majority of active nuclear warheads in the U.S. arsenal at its reinforced Manzano Mountain facility, the Waste Isolation Pilot Project (WIPP) near Carlsbad was designed and built as a long-term storage facility for nuclear waste, and Los Alamos has worked with Plutonium, Uranium, Americium, Neptunium, and the like, often depositing radioactive waste in the environment as an expediency. The development of depleted uranium munitions at Los Alamos has left swaths of the forest adjacent to Bandelier National Monument contaminated with that and other hazardous substances, and this is not to mention the miles of other forests and cañons affected by other chemical and radiological waste.

From mining to experimentation to reactors to detonations to basing of weapons and to waste, New Mexico has probably been more deeply associated with the atomic age than any place, and this legacy of security colonialism lives on in terms of the vast tracts of federal land, the numerous contaminated proving grounds around the state, the high number of military and other federal government employees, and the ongoing memory and experience of New Mexicans. Today many of the States' roadways have billboards saying things like: 'New Mexico, America's Nuclear Colony,' and even while tens of thousands of the states workers work directly for the nuclear state and the nuclear economy, thousands of other residents are deeply anti-nuclear and wary of this element of the states' history.

If the landscape of New Mexico had been refigured by Spanish colonial settlements, then by the U.S. Territorial Authority and new seizures of land, it has been further transformed in the military projects of the past fifty years, and has been ecologically altered for generations, indeed thousands of generations, to come. Scholarly and journalistic attention is only now beginning to turn to the legacy of the Cold War and of nuclear research. It is in places like New Mexico where this 50-year enterprise will be playing out its aftereffects for thousands of years to come. Heightened cancer rates, storage of waste, drinking water and air quality, and a host of other issues related to this history of intensive technological practice now confront New Mexicans urgently. Protected behind a wall of national security and secrecy since 1943, Los Alamos remained immune from any oversight from or responsibility to the New Mexico Environmental Department throughout most of its existence as a weapons laboratory.

In recent years something of a re-articulation of the responsibility and jurisdiction of the Laboratory vis-à-vis the State of New Mexico has been going on. The State Environmental Department has increased inspections and findings of violations at the Laboratory, and has increasingly claimed jurisdiction over the site. Now that a struggle is at hand, and it seems that the way is set for Los Alamos to be held accountable to the state, the NMED has found that the laboratory at Los Alamos 'poses a significant risk to the health of residents of New Mexico' due to its releases of waste and its history valuing so-called scientific development over environmental safety. The colonial relationship here, paralleled also at Sandia National Lab and at White Sands, was particularly

frustrating to many New Mexicans since these institutions had only to answer to elements of the federal government, and often secret elements of the government, despite the fact that they were engaged in research and actions which polluted New Mexico and endangered the well-being of New Mexicans. Hence the current controversy about the jurisdiction of the New Mexico Environmental Department is a key turning point in federalism where these technical institutions may finally be forced into at least partial disclosure and accountability to the populations and societies closest to and most directly affected by their work.

To add insult to injury, or more accurately in a case of colonialism doubling back on itself, jobs and money from the new nuclear economy of New Mexico since World War II have often been touted as unique opportunities and dispensations for state residents. In a particularly chilling version of 'uplift' thinking, the military-industrial complex is often figured as a remedy to the endemic poverty there, which is the result in turn of earlier waves of colonization. Jobs in defense laboratories or in mining are seen as boons to the Spanish-Indian residents in New Mexico who are said to benefit from high-paying jobs in lieu of the supposedly desolate economic prospects that would otherwise face them in New Mexico—in other words their condition for bourgeois existence is the weapons work. Of course a number of other industries and mini-markets without tie to the government do exist and thrive in the state. Tourism and art, for instance, both major money-makers for the state, are not related to the military. The lumber and potash and chile economies are little-related to defense. Yet,

there is a troubling truth in the claim that the economic life of the region is deeply influenced by the weapons infrastructure. The operating budget of Los Alamos National Laboratory is \$2 billion per year (the total cost of the Manhattan Project to develop the atomic bomb during World War II was coincidentally \$ 2 billion), and the total budget of the State of New Mexico, deemed to be among the poorest of the states, is only \$4.5 billion. Factoring in the budgets of Sandia National Laboratory, and the Kirtland, Holloman, and Cannon Air Force bases, and White Sands Missile Range, it is likely that the direct operational budget of federal military-weapons agencies in the state far exceeds the state budget.

The military economy has created local boom and bust cycles in several areas of the state. Roswell's economic life changed with the transition from military to civilian airfield. The towns of Grants and Gallup had a uranium mining boom from the 1950s to 1980s, which is now decried as gone for good as 'the final bust.' Mining machinery and jobs were dismantled after the cessation in demand for U.S.-mined uranium, even though tailings and open mineshafts have often been left in place and continue to endanger community health. Los Alamos has been affected by the buildup or the cancellation of specific programs which draw in specific kinds of physicists. Many astrophysicists and magnetic field physicists were thrown out of work by the canceling of the magnetic confinement fusion program. High energy physics, always a favorite in Los Alamos, saw a number of specialists brought in for work on beam weapons and the Strategic Defense Initiative, or 'Star Wars' in the eighties who were affected when these programs were scaled back in the nineties. These high energy, beam, and

accelerator physicists were again affected by the buildup, then the cancellation, of the Superconducting Supercollider to be built at Waxahatchee, Texas.

The radiological colonization of New Mexico has territorial, ecological and economic dimensions which affect the daily life of the area. The land is a mix of Indian land of various Pueblos and reservations, federal forest and wilderness land, federal land administered by the Department of Energy or the Department of Defense, private property including ranches, estates, and private homes, and state and county properties. Long-touted as a place of clean air and good climate--indeed J. Robert Oppenheimer was sent on his fateful trips to New Mexico, as were many sickly and fey youth, because of the supposedly salubrious qualities of the New Mexico environment--New Mexico is also the site of significant radioactive and chemical contamination which undercuts or complicates the picture of it as a halcyon wilderness. The extraction, refinement, production, and testing of nuclear materials have taken their toll on the state and upon the integrity of the water and the soil and the air. In a bizarre feedback effect, background levels of Americium and Cesium are higher in New Mexico, as they are around the world, as a consequence of the U.S., the U.S.S.R. and France conducting so much atmospheric testing of nuclear weapons, a practice that New Mexico ushered into the world.

Wen Ho Lee and New Mexico Colonialism

The Wen Ho Lee case and the history of modern Los Alamos come to pass within this unique history of New Mexico and its triple colonial legacy. Los

Alamos Laboratory was established in 1943, less than a hundred years after the territory became American instead of Mexican, and only 30 years after New Mexico had become a state. The National Laboratories represent an establishment of white American culture in New Mexico, even though of course these institutions are deeply enmeshed with the areas and communities surrounding them. Not all the employees of Los Alamos and Sandia are white, but most of them are. And, to be sure, the interests that they serve are those of Washington as opposed to Santa Fe. Wen Ho Lee came to New Mexico as a part of this white American defense science culture in the third wave of colonization of the area. But, his ethnicity and his perceived national loyalty would not allow him purely and simply to maintain his position in this white culture of which, ironically, he was already a part.

Fleeing from more overt racism he had experienced in New Jersey and New York in the early seventies, Wen Ho Lee stayed in the western U.S. and eventually went to Los Alamos in an effort to fit in with a white culture and avoid racism. As Lee says in his account of his ordeal entitled *My Country Versus Me*, "By 1973 I was ready to leave the New York/New Jersey area. I felt that people there did not like Chinese or Asian people. When I walked on the streets in northern New Jersey, people made nasty comments, racial comments" (99). For the span of his work at Los Alamos, he was of course aware of linguistic and cultural difficulties sometimes with white neighbors and co-workers, but for the most part enjoyed good work and social relations in the town, and felt himself to be an accepted member. At the time he believed that he was immune from

racism and racist action. Now, he describes quite a different interpretation of things. He has said he was deceiving himself at that time and looking away from the way that his position in Los Alamos and in American society was in fact deeply influenced by his ethnicity. Having joined the weapons infrastructure and working as a scientist, Lee had thought himself beyond the Gestapo treatment of having the secret police come for him. Having now experienced that treatment he is more reflective about his history within the weapons domain, and he thinks in a different way about who is truly allowed to join the American nation in its most central and guarded respects, “once you’ve been admitted into this elite company town, which had more PhDs per capita than any other community in America, you’re pretty well accepted. At least, I always felt I was, until I became a spy suspect” (94). He also says that he “never doubted that the United States is the best place for my family—that is, until I was singled out as a traitor because I am Chinese American” (173).

While of course there are other Taiwanese, Chinese, Korean, African, South Asian, and Mexican American families in Los Alamos, it remains the case that for the most part its population is composed of European Americans of various national backgrounds and religions. Asian scientists at Los Alamos had a certain acceptance of their status lent by the presence of Asian and Asian American scientists in American scientific life in general, yet they still have reported consistent difficulties in being granted trust and authority within this bureaucracy. And, at the time of the Wen Ho Lee case and afterward, Taiwanese, Chinese, and South Asian scientists say they have come under especially wary scrutiny. It

seems there is a glass ceiling for Asian-American scientists in the Department of Energy. Despite a number of Asian American physicists, engineers, mathematicians, and chemists working in this area, none has been in a position of high management or policy with regards to nuclear weapons and national security until 2003.⁸⁷ These scientists have become the 'Stranger' as discussed by Simmel: they belong here, they work in these laboratories and they have the proper clearances and are 'accepted,' but there is also a countervailing tendency to treat them as foreign, to suspect that they must be loyal to another nation or culture, and deny them the kind of autochthony explicitly or implicitly recognized for other groups.

Although colonized, and often treated as colonial subjects (economically and politically disenfranchised, displaced by the imperatives of the military state), Indian, Spanish, and Mestizo residents of New Mexico were relatively easily and directly integrated into the envelope of U.S. nationalism during and after World War II. A New Mexico unit, primarily composed of Latinos and Indians, was among the first U.S. units captured in the war, in the Philippines, and they were subject to the Bataan Death March and harsh incarceration at the hands of the Japanese. Much has been made in history and in popular culture of the famed Navajo Code talkers who used their language as a form of encryption which proved unbreakable during the war. Fears of espionage against the Manhattan Project did not entertain any scenarios according to which the native populations of New Mexico were seen as threats. They were seen as Americans, or as U.S.

⁸⁷ Only recently has an Asian American been named to an important scientific leadership role with respect to nuclear weapons at Los Alamos.

colonial subjects, albeit as exotic ones who admittedly did not conform to the supposed norms of American life at the time but who could contribute nonetheless to the national war effort. In contradistinction to this we can see that Wen Ho Lee's status was somewhat more ambiguous—a U.S. citizen, and thus an American, and one who worked for the war and weapons effort, yet one who still stood out and couldn't altogether be smoothly integrated into the dominant vision of Americanness.

Chapter 7

Social Life of Los Alamos

The sense of place and the social life of Los Alamos are influenced by several decisive factors. To begin with it is small, only about 17,000 people, and it is somewhat isolated on a series of finger mesas, including the Pajarito Plateau, which fan out around the Jemez Mountains. While there are other towns like Pojaque or Española about 15-20 minutes drive down into 'the Valley' (the Rio Grande Valley) and like Jemez Springs about an hour's drive further up into the Jemez, the size and the situation—on the mesas and among forests—give Los Alamos a feeling of isolation. Furthering this geographic isolation are various elements of social and security isolation which have characterized the history of the town since 1943. Initially, from 1943 until 1945, the town and the work there were strictly secret, not officially listed on any maps and referred to only by elaborate code names. Much is made locally of the fact that during this time the town was represented and served by a single post office box in Santa Fe, P.O. Box 1663. The Sears and Roebuck Corporation refused to send any more catalogues to the address during the war after they became incensed that the same 'family' had ordered so many catalogues already.

The social circumstances of the Manhattan Project in Los Alamos are interesting indeed. Much of the historical and social sense of the town was 'set' during those years. That time continues to have a strong influence on both the

organization and the imagination of Los Alamos.⁸⁸ With August 1945, the use of the atomic bombs, and the end of the war in the Pacific, the existence and the work of Los Alamos were revealed dramatically to the world. Any number of newspaper headlines from around the world on August 6th or 7th 1945 described this small town in the remote New Mexico mountains which had created a super-weapon that seemed the stuff of science fiction. Indeed, such a weapon had first been imagined decades earlier by such writers as H.G. Wells.⁸⁹

The end of the war precipitated divergent responses on the part of the community of Los Alamos. Most of the workers on the Manhattan Project had never envisioned a use of the bomb against Japan, when the real worry motivating the initiation of the Project and the participation of most of these scientists was the evil of Nazi aggression and the possibility that Heisenberg and other physicists working in Germany would develop the weapon first.⁹⁰ Leo Szilard and other Project workers tried unsuccessfully to prevent the use of the bomb against Japan. They were especially horrified by its use against Japanese

⁸⁸ While the history of the Manhattan Project and early Los Alamos is fascinating, there are a number of very good historical sources which bear on it. See for instance Richard Rhodes *The Making of the Atomic Bomb*, Richard Feynman *Surely You're Joking Dr. Feynman*, and, for an excellent oral history of the Manhattan Project and the decades after, see Katrina R. Mason, *The Children of Los Alamos*. As this study concerns the society of Los Alamos since 1943, I will make reference to the Manhattan Project years in terms of ways that they instituted key organizational decisions for the Lab and the town and provided a sense of mission and meaning which has had a longstanding life there. I also conducted a number of interviews of Manhattan Project scientists, engineers, technicians and residents of Los Alamos.

⁸⁹ H.G. Wells predicted these weapons and their effects in 1914 in his *The World Set Free*.

⁹⁰ Indeed this aspect of the use of the bomb highlights one of the most important aspects of the history of technology: that inventions and technical devices almost inevitably come to be used for purposes and applications differing from their originally intended purpose as these devices are taken up by a variety of social actors and are integrated into the operation of industrial and military bureaucracies.

civilians. Nellie, the wife of one Manhattan Project scientist, told me that many of the residents of Los Alamos were “shocked by the news of the use of the bomb against Hiroshima on August 6th” (despite the fact that several members of the Los Alamos Laboratory were part of the teams in the South Pacific, on Tinian Island, which prepared the bombs for use). Thus, many scientists, such as Einstein, Szilard, Bethe, Feynman and Oppenheimer, felt not only the existential conundrum of having brought such weapons into the world, but also the guilt of the brutal use to which they were put in Japan. When the first bomb test took place on July 16th, 1945, Oppenheimer made the famous quotation from the *Bhagavad Gita* to the effect that “I am become death, the destroyer of worlds.” Kenneth Bainbridge, who was the director of the Trinity test, told those around him that “Now we have all become sons of bitches” when the bomb went off.

Some scientists, the ones most troubled by the advent and use of the bomb, packed up and left town in September 1945.⁹¹ A number of Los Alamos residents were eager to return to previous lives in towns far from New Mexico, as “many scientists, technicians and graduate students rushed to return to universities and industries from which they had been begged, borrowed or stolen for the wartime project.”⁹² Many were explicit that they had come only for the wartime project (which they took to be an effort against the Nazis) and that now

⁹¹ It should be noted here that my sample is somewhat skewed inasmuch as I have primarily had interaction with those who decided to stay in Los Alamos and who, at least tacitly, supported its continuing military mission. For the most part I have not had the chance to interview those who left after the war because of their political and ethical misgivings—for their sentiments I rely on print sources like Alice Kimball Smith, Leo Szilard and Joseph Rotblatt.

⁹² From the booklet *Los Alamos: beginning of an era 1943-1945*, Los Alamos National Laboratory, reprinted in 1986 on Los Alamos, Los Alamos Historical Society, p. 61

they were done. Also, there were those who, aside from just desiring to return to their former life, made a definitive choice that they would not continue to work on such weapons, and many of these ended up turning their efforts instead to working against their spread and their very existence. This was the inception point of the famous scientists' movement for disarmament and for peace.⁹³

Those who had played a central role in bringing about these bombs now saw no tenable policy or wartime position for them which was compatible with ethical human life—or with the survival of life on the planet. Hence in this respect the advent of the bomb represents a crucial turning point in human history when the magnitude of power and killing by weapons is dramatically increased and the possibility of human self-annihilation becomes a concrete possibility rather than a mythical one. These ethical and historical questions about the bomb prompted a variety of responses from those who had worked on it. Some saw the bomb as a politically necessary and fitting weapon for the U.S. arsenal, while “others, suffering intense pangs of conscience, thought it (the laboratory) ought to be turned over to basic and peaceful research.”⁹⁴ Indeed this conundrum and difference of opinions has defined the trajectory of Los Alamos and the other National Laboratories since that time.

Oppenheimer took the opportunity of the end of the war to express feelings that were shared by many involved in the Manhattan Project. While many of these personnel were eager to continue research in atomic physics and

⁹³ See Alice Kimball Smith, *A Peril and a Hope: The Scientists Movement in America 1945-1947*, Chicago, University of Chicago Press, 1965, on the scientist's movement. Alice Smith was history teacher at the school in Los Alamos during the Manhattan Project.

⁹⁴ *Los Alamos: beginning of an era 1943-1945*, p. 61.

engineering, there was also a considerable sense of reservation about the new weapons they had created. When General Groves presented the Los Alamos Laboratory with a Certificate of Appreciation from the Secretary of War in October 1945, Oppenheimer warned that:

Pride must be tempered with profound concern. If atomic bombs are to be added as new weapons to the arsenals of the warring world, or to the arsenals of nations preparing for war, then the time will come when mankind will curse the names of Los Alamos and Hiroshima.

The peoples of this world must unite or they will perish. This war that has ravaged so much of the earth has written these words. The atomic bomb has spelled them out for all men to understand.⁹⁵

While everyone involved shared a sense of awe and of respect of the power of the atomic bomb, this sense and the conditions of world politics at the time gave rise to several differing views about its place and its future. There were those who still saw the discipline of nuclear weapons physics as one containing a number of 'technically sweet' problems.⁹⁶ There were those, such as Stanislaw Ulam and Edward Teller, who saw the hydrogen bomb, which they had theorized

⁹⁵ From Oppenheimer's acceptance speech for the Certificate of Appreciation at Fuller Lodge, Los Alamos, quoted in Groves, *Now It Can Be Told*, p. 355.

⁹⁶ The expression 'technically sweet [problem]' arose during the Manhattan Project to denote the challenging questions in physics or math or chemistry which had to be solved or modeled in order to produce a working bomb. There was a widespread sense, as well, that these problems also had the characteristic of pushing the envelope of scientific knowledge about nature and matter—hence the conviction still common in Los Alamos that much of the work there bears on 'basic science' about particle behavior or energy release.

during the development of the fission bombs in the Manhattan Project, as the next logical and challenging step in scientific research.⁹⁷

With the range of interpretations about what to do next, and the prominent desire to return to some semblance of a pre-war life, “the Laboratory was staffed at the end of the war with people who were far from sure they wished to remain in Los Alamos.”⁹⁸ Groves commented on the significant shift precipitated by the end of the war.

Even greater than the officer problem was that of the demobilization of the scientific staff. Many of these men had come from academic jobs and were eager to return to them. The senior men wanted to get back to their universities in order to re-establish themselves in their departments. The more junior men wanted either to take up the unusually fine positions that had been offered to them or to complete their work for advanced degrees.⁹⁹

Hence, from Groves’ standpoint of maintaining a viable operation that could continue to produce atomic bombs, the end of the war and the fact that so much of the Manhattan Project had relied on either civilian scientists or officers commissioned for the war who were “eager to return to civilian life” provided for a great difficulty in which the continued operations of the major MED (Manhattan Engineering District) facilities, Los Alamos, Oak Ridge, and Hanford, was uncertain.

⁹⁷ Stanislaw Ulam was a close friend of my grandparents, so some of this account comes from childhood conversations with him (he died when I was 12 years old) and from stories from my grandparents, in addition to historical sources about the development of the laboratory after World War II. See for instance Richard Rhodes’ *Dark Sun*.

⁹⁸ *Los Alamos: beginning of an era*, p. 61.

⁹⁹ Groves, p. 376-377.

As Groves, along with the rest of the Army and the nation, readjusted to peacetime life after the close of the war, he grappled with questions about which parts of his wartime empire were crucial to ongoing U.S. security. He decided in short order that "it was particularly important to continue the Los Alamos laboratory so that the nucleus of a staff for future weapon improvement would always be available; this presented a much more difficult problem."¹⁰⁰ For the reasons cited previously, Groves was entirely unsure of being able to maintain either the scientific or military staffs that would be necessary to continue the mission he had in mind. Adding to the difficulties was the fact that no major Congressional decisions or funding were made immediately after the war, such that Groves had to make a number of major decisions himself. While Groves was dealing with these difficulties, "it was not long before the question of whether to relocate the laboratory or to build up Los Alamos as a permanent installation came to the fore. A number of people strongly urged that we abandon the Los Alamos site and re-establish the laboratory in southern California."¹⁰¹ For some the ongoing mission of Los Alamos and the Manhattan Engineer District was in question, for others the mission important but the locations and facilities were up for grabs.

In this climate of uncertainty about the future of government atomic research, Groves realized that "in order to make all concerned realize that Los Alamos would be an enduring affair, the decision had to be made

¹⁰⁰ Groves, p. 377.

¹⁰¹ Groves, p. 378.

without delay.” He noted that he decided against moving the laboratory since “we also had a major investment in Los Alamos—a site that had proved to be entirely satisfactory in every way.”¹⁰² Accordingly Groves took the decision to keep the laboratory at Los Alamos and to build it up further, including in the first place building more permanent family housing.¹⁰³

As a site for the burgeoning practice of experimental astrophysics and experimental nuclear physics Los Alamos must have been a big draw for some physicists and engineers. The culture of successive nuclear testing which soon developed allowed physicists to perform ultra high energy trials of their theoretical speculations and to use this data in their quest to better understand the processes of fission and fusion, a whole host of behaviors exhibited by sub-atomic particles, and properties of materials under extremely high pressure and energy (plasma physics and hydrodynamics). Not to mention the fact that big federal funding meant that accelerator and computer facilities would be top-notch. In fact much of the development of modern computing, and especially of supercomputing machines and applications, is tied to the history of nuclear research and touches upon the history of Los Alamos.

John Von Neumann and Stanislaw Ulam both worked on the early notions of computer design and electronic logic. While Von Neumann would return to

¹⁰² Groves, p. 379.

¹⁰³ Housing had perennially been a problem during wartime Los Alamos as rapid development of the project and the influx of more and more people had outstripped housing construction.

Princeton's Institute for Advanced Study after the war and continue his computing research there, Ulam remained in Los Alamos for some time where, as a theoretical mathematician, he worked on problems of nuclear physics, computing and physical modeling.¹⁰⁴ Evelyn Fox Keller has described Ulam as having decisively defined and given shape to computer modeling in the physical sciences in a way which still finds its use in the many applications of computer modeling such as weather and traffic flow.¹⁰⁵ As more and more test data was accumulated and bigger and more complicated bomb designs were attempted, supercomputers became crucial as the tool used to analyze the complex data and to make models of explosions. As Roy, one veteran tester, told me, "you have all of this preparation, years, and all of this nuclear material and all these gauges and collectors for experimental data set up around it, then, all of a sudden, it takes place and goes off and you have this tremendous burst of energy, and so many things are happening, but so quickly. Really, the whole thing is over in just fractions of a second. Of course the shock and the rumble and the cloud and all that last longer, but what happens there in the device is over so quickly, and we have to measure and keep track of what happens in those hundredths and thousandths and millionths of seconds." So the role of supercomputers to analyze and model this data at extremely compacted time scales and extremely high energies was paramount.

¹⁰⁴ Von Nuemann later joined the Armed Forces Special Weapons Project in Washington, DC in 1950.

¹⁰⁵ At lectures on 'Modeling in the Physical Sciences' at the École Normale Supérieure of Paris, on Rue d'Ulm, Fall 2001.

Gender and technical work in Los Alamos

Early work on just how to break down and perform computer problems was carried out at Los Alamos by the likes of Feynman, Von Neumann, and Ulam during the Manhattan Project. But, the role of the mathematician WACs¹⁰⁶ and the wives of many Project scientists who worked with these equations and who physically prepared the punch cards for the computer and ran the processes is not at all to be underestimated.¹⁰⁷ Feynman, who oversaw a group of these women working on an early IBM punch card machine emphasized how important their work was to the enterprise. Yet, par for the course in history in general, and especially in technical history, the participation of these mathematician women who were pioneering the nuclear age has either been glossed over or has been represented as an essentially secretarial role. While the history of the Manhattan Project is usually recounted as that of the great male scientists who took part in it, albeit in a way that emphasizes their collaboration, the daunting technical challenge of the Project, the expanding scope which required more and more technically-qualified workers, and the isolation and secrecy of Los Alamos drew many of the women of the community into the lab—and as many of them accompanying their husbands to Los Alamos also held degrees in science and math, they were especially valuable to the work there.

¹⁰⁶ Refers to members of the U.S. Women's Army Corps. Over 150,000 American women served as WACs in World War II, and they made contributions at many levels of organization, mobilization, and readiness.

¹⁰⁷ On this and other aspects of women's roles in Manhattan Project Los Alamos, see the excellent collection *Standing by and Making Due Women of Wartime Los Alamos*, edited by Jane S. Wilson and Charlotte Serber, Los Alamos, Los Alamos Historical Society, 1988.

Despite the spirit of cooperation, Los Alamos during the Manhattan Project, and to a large extent since then, remained the site of the unfolding of a masculine drama. We usually hear a lot about Oppenheimer and Groves and Fermi and the like, and they are credited as driving the history there. Daisy, a friend of my grandparents who had worked on the math and computer teams during the Manhattan Project, conveyed both the excitement and the frustration of the experience, "We were called to Los Alamos in 1943 when the Army wanted Edward, my husband, to work on the Project there. As I had a BS in math, and honors, I found myself working on the calculations at the heart of the Project which we were learning to carry out on that early machine. It was a new frontier, just like we felt the place itself was, and we had to figure out the ways to design the problems and the calculations so that the machine would give us the information we were after. Then, we'd have to recombine data from different aspects of the problem that we had run separately. Although there were some really smart folks like Dr. Feynman working on that, it was us girls who really did most of the nitty-gritty and the day in day out work of it. We would work late into the night sketching out the problems and trying different configurations, and that is not even to mention getting all those damn cards ready. It was us group of girls who really pushed that task forward, but of course it often gets remembered as a big scientific problem that the men figured out. But we were glad to be a part of it, and most everyone there knew who was doing what. Everyone in town at that time was working hard and burning the midnight oil. Feynman was great,

he didn't make any pretenses about how much we were doing, he was glad for our help."

Daisy's account runs parallel to that of Cheryl, a computer programmer who had worked long hours with computing and physics groups at the Laboratory in Los Alamos, as well as at other federal scientific institutions such as the project of the Super Conducting Super Collider at Waxahatchee, Texas, before its cancellation. Cheryl also describes a situation of working on code that was central to key experiments and groups, but at the same time being treated as lower status, that is not as properly technical and scientific. She felt that her work was treated as clerical, "I wrote applications that are crucial for keeping the beam up and that require a high level of technical proficiency. But, some of the physicists act like my work is simple compared to the physics experiments that they are engaged in. I mean, they couldn't observe or study the things that they are looking at without the tools and the means we are developing. But, to them it is like emptying wastebaskets or something." Her situation presents some of the tension of the division of labor and of gender in the town. Working as integral to the operational process and the experiments at Los Alamos, Cheryl felt nonetheless that her contributions were undervalued and minimized by the male physicists with whom she worked. At the same time her story also makes clear that the labor situation described by Daisy before her has continued in the respect that spouses of scientists who are hired at the Laboratory often find work within it as well. This has meant especially over the years that the wives of many scientists, especially physicists, have come to work also in the town business.

Although there have certainly been a number of cases of husbands coming with their scientist wives to town. As in Daisy's case, it is often the case that these spouses have substantial technical qualifications as well, and in a number of instances have PhDs themselves. As in Daisy's time in the Manhattan Project the size and complexity of the project at Los Alamos has required a great deal of labor not directly carried out by the main experimental scientists but crucial to the ongoing life of the place.

Education and the PhD in Los Alamos

Part of Cheryl's predicament came as a result of the stern academic hierarchy which exists in Los Alamos, and which accounts for considerable jockeying and competition between scientists. Los Alamos is often cited as the town with the most PhDs (per capita), and the degree is revered there. There is an unwritten rule that many of the crucial positions of power within the Laboratory will be occupied only by PhD physicists. While on the one hand this is reminiscent of academic standards and structure which make this kind of delineation about the conduct of research (and, indeed, the technical staff members of Los Alamos are employees of the University of California, so there is an explicit academic setting and imprimatur), yet, on the other hand, there is also something of an elite but puerile snobbery to the valorization of the PhD in Los Alamos, and often times it comes across as a blunt assumption about intelligence and worth. Having a PhD imparts (or those who have PhDs there demand through their behavior) a status as highly intelligent and as expert, while not having a PhD is often seen as

equivalent to a high school or a regular college Bachelors degree and a disqualifier for entering certain technical and difficult conversations. Physics and math are afforded a similar valorization as PhDs, and hence the highest title of honor in the town is to be a PhD in physics or in math. Other employees with bachelors or masters often feel themselves looked down upon as non-scientific. Engineers and chemists sometimes feel themselves treated like auxiliary personnel to the main act. My own father, who has a master's degree in civil engineering, was group leader in materials science technologies and even was briefly division director of engineering. Yet he felt that he was subject to a glass ceiling where his status as engineer without a doctorate disqualified him outright from consideration of several positions, despite that not being stipulated as a requirement. Even at the last years of his long employment at the Laboratory, he was identified more as a facilities and engineering worker, not a scientific worker. Important as his labor may have been for the conduct of operations and of work there, he was also treated as a kind of background worker to the main business of the Laboratory.

This valorization of education goes back to the Manhattan Project, when the average age was very young but there were an astonishing number of doctors in the young town. With such a number of young scientists, there was an academic and college-like feeling. Those who came to Los Alamos during the war represented the finest of European, Canadian and American physics and engineering at the time. Many of the participants had crossed paths before in Gottingen, in Copenhagen, in either Cambridge, in Princeton, in Berkeley, or in

Pasadena. After the war they would find themselves at Cornell, Princeton, Cal Tech, Chicago and Berkeley, among a number of other institutions. This conjunction of prestigious scientists, and the number of current or future Nobel Prize winners who worked at Los Alamos during the Manhattan Project, created the allure of a community of extraordinary intelligence and capability. The Manhattan Project became the model for any intense and coordinated scientific project, such as the 'Manhattan Project on AIDS,' or other calls for such massive projects. Indeed at that time scientists were trying to discover and decipher behaviors of the atom and the nucleus which they then immediately hoped to make use of to unleash power in the bomb. While the implications were daunting, it is undeniable that much of the science involved is fascinating and was certainly cutting-edge at the time. This also informs a lasting pattern where scientists who are interested in advanced research in their specialist areas of astrophysics, nuclear physics, materials science, chemistry, biology, or what have you have been drawn to Los Alamos to, in their eyes, further their domain of fundamental research. The connection to weapons may be seen as a negotiation to be able to perform the fundamental knowledge work or it may seem to be nonexistent to the scientist, but a number see themselves as practicing basic science with no reservations.

Funding and the draw to Los Alamos

Even more to the point, the resources to be able to study these kinds of physical problems weren't marshaled or applied in any other sector. While some

universities in the U.S. operated accelerators, they were generally much smaller and lower-energy than the Department of Energy accelerators. A prominent physicist told me that he had been teaching physics at a top research university, but that he was lured to Los Alamos simply because of the fact that “the equipment and the funding was better there.” As far as he was concerned “as a scientist the best decision was to go to Los Alamos where I could study bigger, or, often, smaller and more intense problems in particle physics. The accelerator power and the experimental time at the university constrained my research by limiting me to certain energies while at Los Alamos this would not be the case.” For him following the unfolding of his research as he saw it meant taking advantage of the facilities and capabilities they had at Los Alamos. This physicist has been very active in experimentation and in management of the accelerator at the Lab, and he has worked with a number of other DOE institutions. For him, “it meant the chance to see and take part in experiments that I never could have carried out at the university.” In this respect the ‘technically sweet’ nature of much of the research seems to have continued to draw scientists to Los Alamos even after the Manhattan Project and into the Cold War. Any number of scientists there have told me that they thought the chance to work at Los Alamos meant practicing a much higher level of science. Due to the scientific prestige of the Manhattan Project and the high ongoing level of investment in the facilities there, an appointment to Los Alamos Laboratory has continued to be a scientific accolade.

Another group of accelerator technicians and physicists from Los Alamos who I was lucky to be able to visit during a research trip to CERN, the European Center for Nuclear Physics near Geneva, credited their ability to be able to do cooperative and ongoing research at CERN directly to their association with Los Alamos. This team had been coming to CERN to carry out projects for several years, and other Los Alamos scientists and teams have long been part of the research there.

Wen Ho Lee's story is not dissimilar from a number of other physicists at Los Alamos. He had worked for other Department of Energy institutions like Idaho National Engineering Lab and the Argonne National Laboratory. While he had found those other jobs prestigious at the time, he felt it much more a sign of recognition to be hired at Los Alamos. Where "those other places had some good scientists and engineers working for them, and they did some interesting problems, they did not have the reputation or the intensity of Los Alamos. When I got the offer from Los Alamos I thought to myself 'now this really means something.' And I felt very honored, like I was really part of the scientific establishment of the United States." This is not an uncommon story: many Los Alamos workers have worked previously at other Department of Energy or other high-technology research sites. Roger, another PhD engineer said that he felt a sense of recognition to be hired at Los Alamos, like it meant that he was judged promising as a scientist. In coming there he felt like he became part of an elite group of researchers and had access to unique problems. More than one physicist has described to me how after completing their doctorates and then

teaching at colleges or universities and feeling unsatisfied, the call to Los Alamos came as a sign of respect and as an opportunity to focus and apply their skills. Regardless of how they feel after they come here, it is clear that throughout the last forty years scientific prestige and the sense of an elite technical community has animated the decisions of those who would come.¹⁰⁸

To step back once again to the era of the Manhattan Project, the draw of the 'technically sweet' problem and of discoveries and theories on the edge of material knowledge were powerful driving forces for those working in Los Alamos. Several scientists of the period give an account like the one of Feynman, in which he says that at the time, during the Project, the implications and the historical consequences seemed far off, edged out for a time by the fascination in the problem at hand. Only later he says did they have the chance to think about some of the ethical questions entailed in the work. By all accounts the feelings of a monumental challenge and a race against time strongly influenced the society of Manhattan Project Los Alamos. The scientific problem was simply impossible in the eyes of many, and the exigencies of World War II hung over them. In most cases, workers had been asked to work on a scientific project of vital importance to the war effort. Many did not know any specifics about the project until they arrived at Los Alamos. Once there, most found the

¹⁰⁸ While undoubtedly Los Alamos retains prestige in the scientific world, recent scandals and reorganizations, foremost among them the Wen Ho Lee case, have soured many workers' impression of their jobs at LANL. According to a number of informal conversations in the recent months, it would seem that morale may be at an all-time low there. Not only do scientists and technical workers feel circumscribed and maltreated by the clumsy investigative efforts of the FBI and other agencies, but the successful efforts of the Bush administration to oust the University of California as manager-operator of the laboratory (in order to try to make way for the University of Texas) has led to a round of retirements and a clear increase in ire and uncertainty in the town.

work fascinating and stretching to their conceptual ability and their training. Also, many of them felt a personal motivation to work on the weapon given their abhorrence for Nazi Germany coupled with real fear of German science.

It seems that since the forties, there have been at least two elements to the motivation for working at Los Alamos. Although they are sometimes combined and intertwined, on the one hand there is the scientific curiosity and the technical fascination which fuels attraction for the fundamental research side of the work. While on the other hand we have strategic and patriotic motivations for the work. In its first form these motivations were based on the fear and hatred of the Nazi regime, and the conviction that the world was in an all-out war in which advanced technology would play a major factor. Later, as the geopolitical situation changed, the strategic threat and consideration became the Soviet Union, but still a threat to freedom and the American way of life was cited. Now a motivation for working on the bomb could be found in needing a defense against the Communist U.S.S.R. As this strategic situation had its roots and its shaping in World War II, Los Alamos has long remained a place which is still deeply touched by the legacy of the war. Another element of the patriotic motivation for weapons work is the investment in and championing of American state power for its own sake. As Los Alamos changed after the war and as the nuclear state grew, an ongoing military role, despite the departure of the GIs and the gates, would continuously bring active-duty and retired military personnel. While high-level science still took place, it became clear too that what was at stake in it was the tools of state power. Many workers in Los Alamos actively embraced this role.

Those who were or had been in the military saw it as a continuation of their service to their country. For civilians who had never been in the military, the work there either seemed like their military contribution or as a guarantee of peace and freedom through strength. Two retired Navy officers who went on to work at Los Alamos were expressing their view of the right direction for the nation and its leadership, they said, when they told me that on a hunting trip in 1988 they had sat around the campfire drunk while firing off their guns and yelling "Go George Bush! Fuck Dukakis!"

Each particular motivation to work in this area has in common with the others an awareness of the power of the bomb and the energies it releases. While some workers hope frankly that the devices will never be used, and thus toil on them in the hopes that the 'logic' of deterrence will hold, others are fascinated by the sheer power of the bomb in its own terms, without a specific scenario for its use or place in the world. This motivation almost bends back to the original technical motivation in that this one too is characterized by its involvement in the science and the experimental aspects of the work, only here the enthusiasm is generated largely by a fascination with the power of the weapon and the tremendous effects it unleashes. This is a territory which is much darker and more disturbing, but also very human.

As a site of the development of weapons, Los Alamos certainly shares in a history of thought and of social institutions bearing on force, destruction, and killing. This may come across either in the darker and more brooding form or in the too-ready glee taken in seeing these only as experiments and elements of

research. Mark, a physicist who was instrumental in the hydrogen bomb project told me that “we just liked the kind of thing we were doing. We were fascinated by the technical questions and we were making the biggest manipulations in energy of Earth’s history. The sheer scale of it was a draw.” Sometimes the statement of feelings is even darker and more direct, as in the case of Sam Cohen, said to be the father of the neutron bomb (a kind of low blast energy, high radiation bomb designed to kill or to disable the nervous system or gastrointestinal tract by a massive neutron pulse), “I’ve rationalized my fascination with nuclear weapons by saying it’s important to the security of my country, and so there are no qualms to be had. If I went down another level in my psyche, I wouldn’t know what to say—I’ve done it because I wanted to. So that essentially sums me up.”¹⁰⁹ What motivated him, on one level, the glib and direct level, to do this work was thoughts of deterrence and freedom. At another more fundamental and more troubling level, though, he *liked* doing the work, not so much in the technical as in the ghastly sense. Cohen relates a tale from “the evening of Hiroshima, when Oppenheimer was describing in very crude terms the catastrophe that had taken place over that city, the scientists who were listening to him were a bunch of howling savages, ebullient beyond imagination, as pleased as punch at what they’d accomplished.” He adds that “there may have been a few who sat quietly while Oppenheimer was holding forth, but I don’t recall seeing any.” Evelyn Fox Keller has speculated that this dynamic is related to a prankish and destructive puerile impulse (of lighting fireworks and torturing

¹⁰⁹ From an interview with Sam Cohen in Robert Del Tredecì, *At Work in the Fields of the Bomb*, New York, Harper and Row, 1987, p. 157.

insects and small mammals) which then grows up into a fascination with bigger and bigger pranks, bangs, and levels of destruction.¹¹⁰ Notwithstanding the particular dynamic that does hold sway, the power of the bomb and the way that it releases incredible forces are central to ways of looking at it.

Post-war Los Alamos

To return to that crux period immediately following the end of the war in 1945, a time that was pivotal for the world and nation as well as for the town of Los Alamos, it would seem that most of those who found their motivation for working on the Project in opposing Nazi tyranny left town, while those who were motivated by the scientific draw or by other factors were more likely to stay on and continue the work. The likes of Leo Szilard considered their work there to be done, and would shy away from any further weapons science. Hans Bethe, although he would continue to return to Los Alamos as a visitor over the years, became staunchly opposed to the hydrogen bomb and committed himself to disarmament. Others, who considered the 'Super,' or hydrogen bomb, a worthwhile project, or who wished to continue accelerator research or to further develop the original fission designs of the Manhattan Project, stayed on and were eager to continue in the work at hand. Brant Calkin, son of 'Old Timer' mathematician Jack Calkin recalls how "World War II was no sooner over than we were on to the H-bomb. There was no break when you would say, 'Now I will

¹¹⁰ In her *Secrets of Life, Secrets of Death*, New York, Routledge, 1992. She says that the bomb scientists are often those little boys who lit off too many fireworks when they were young. Bill Kornblum has astutely pointed out that this may well be true, or that they were the ones who didn't light off enough fireworks when they were young.

ask about that."¹¹¹ In fact, it was those who were building and testing fission weapons who saw the most harried work after World War II. American testing at Bikini Atoll in the Pacific began within a year of the first explosions. Those who were building these bombs and taking them to the Pacific, together with those who were photographing and measuring these tests were a busy group in Los Alamos.

Some of the scientists, even some who had been there during the war, saw the period after the war and on into the fifties and sixties as the golden age of Los Alamos. The Laboratory and the town were getting bigger and so were the projects and challenges. And, of course, 1945-1963 was the era of above-ground nuclear testing, so Los Alamos teams would frequently travel to the Pacific and to Nevada for these tests.¹¹² Those workers who saw these tests and participated in them have a high distinction in the weapons community as seasoned pioneers. 'Old Timers' is the term used to refer both to Manhattan Projecteers and to those who came to Los Alamos during the era of above-ground testing.¹¹³ While forms of interest and attachment to the bomb can be found in all generations of the town, those who took part in above-ground testing often display what we might call an almost *religious* attachment to the experience. They invariably related tales of the sheer power and splendor and

¹¹¹ In Katrina R. Mason, *Children of Los Alamos*, New York, Twayne, 1995, p. 124.

¹¹² My grandfather went several times with Los Alamos teams to Christmas Island as part of these efforts.

¹¹³ Of course, as time goes on in its insistence, the frame of reference for the notion of 'Old Timers' expands. At first it was only Manhattan Project personnel, then those with any experience of above-ground testing, then those with long experience even of only underground testing. It is interesting to note that today, with testing already stopped for more than ten years now, those with any actual testing experience are starting to fall into the category of the 'Old Timers.'

even beauty of the explosions. Of course the first test has become a legendary event with plenty of spiritual overtones from the uncertainty of fate bearing on whether the bomb would work at all, and if so if it would incinerate the atmosphere, to the invocation of the Bhagavad Gita by Oppenheimer in the moments after the blast. While it is true that those present were conducting a very uncertain experiment and that they were self-consciously witnessing the birth of a new age, it also must certainly be true that they were deeply and bodily influenced by the detonation and the aftermath.

Those from the era of above-ground testing seemed to have been always moved by the experience and the magnitude of the explosions. In the lab, one said, “we knew theoretically that we were intervening in nature to tap tremendous power. But, when you go out there and you test it, you don’t just see but you *feel* that an energy transfer is taking place.” While the work in the lab was so abstract and called upon to be so precise, the testing in the field gave a dramatic concretization to it. It would be fair to say that some of these early testers had a *titanesque* relationship to the experience. That they were accessing deep powers of nature was readily evident to them in the way that they could compare the physical size and scale of their body with the humongous blast. They were acutely aware that they had taken up a power like the power of the Titans to make fire.¹¹⁴ General Thomas F. Farrell, General Groves’ deputy, was struck by such a sense when he witnessed the Trinity test:

¹¹⁴ I am indebted to Michel Tibon-Cornillot, a historian of technology from the EHESS in Paris, for this concept of the titaneseque in relation to modern technology. For Michel, if the gods have fled and we live in a mechanistic universe (or at least *weltanschauung*), humans have now taken it upon themselves to take over the knowledges and the rights

Thirty seconds after the explosion came, first, the air blast pressing hard against the people and things, to be followed almost immediately by the strong, sustained, awesome roar which warned of doomsday and made us feel that we puny things were blasphemous to dare tamper with the forces heretofore reserved to The Almighty. Words are inadequate tools for the job of acquainting those not present with the physical, mental, and psychological effects. It had to be witnessed to be realized.¹¹⁵

For another of these early testers, Joe, sounding almost poetic, "The blast was awe-inspiring. For one thing it was the culmination of all this work we had been doing. But it was more than that, also it was just the sheer hauntingness of it. If you just looked at it like flash and cloud, you had to see that there was a lot that was really beautiful about that, that really exemplified a beauty of nature...a beauty of nature in her perturbed state that we usually don't get to see at our level of planetary existence." The scale of the blast and the associated phenomena begs comparison to natural disasters as our only means of comparison, as in volcanic eruptions, lightning, or earthquakes. But, for the astrophysicists there was a unique and intensely interesting opportunity provided here. While vulcanologists and geologists can hope to study volcanoes and earthquakes by following leads and being in the right place, actual investigation of stellar processes up close was essentially impossible for astrophysicists. Space travel wasn't invented in any form yet, and the sun was too far away to take many useful measurements and observations. The explosion of fission,

proper to the Titans. These are especially forms of knowledge that have to do with energy and destruction.

¹¹⁵ Quoted in Leslie R. Groves, *Now It Can Be Told: the Story of the Manhattan Project*, New York, Da Capo, 1962, Appendix VIII, p. 437-8.

then fusion bombs gave the opportunity for physicists to create a localized stellar effect on the surface of the earth, and thus to have the opportunity to observe and to study it. No wonder the fascination and the affect when the testers saw these stars taking shape before them.¹¹⁶

In addition to this still cutting-edge work in astrophysics and nuclear physics, people were attracted by the reputation of the town and by the location and the surroundings. People quite commonly cite one or more of these reasons as their big rationales for coming and for staying here. My grandparents, a nurse and a surgeon, came here in 1946 just after my grandfather was out of the Army Air Corps as a flight surgeon. He was working then once again at Washington University in St. Louis where he had done his residency before the war. WU held a contract with the Army to provide medical doctors to Los Alamos, so my grandparents were sent west. As my grandmother would say,

I was from Pennsylvania and your grandfather was from New York State. We had never been to New Mexico before, not even close. But when we got there we loved it. The air was so clean and crisp, and the mountains and the landscape were just breathtaking. We just loved it, and we felt a little bit of frontier mentality, like we were coming to this new land. After your grandfather finished his term of contract for WU, we decided to stay here and your grandfather became the first doctor in private practice in town. He had done

¹¹⁶ As it was for these scientists, the blast became a symbol of tremendous power and dread, but also haunting beauty, for millions of people in the nuclear age. I saw an excellent presentation on the role of the mushroom cloud in the symbolism of the nuclear age by Dina Titus, a professor of history in Nevada and a member of the Nevada State Senate, and author of the book *Bombs in the Backyard: Atomic Testing and American Politics*, University of Nevada Press, 1986, at the Southwest American Culture Association meeting in February 2003 in Albuquerque.

residencies in both surgery and general medicine, so for years he did both here when there weren't very many doctors.¹¹⁷

My grandparents were also enticed by the community, they came to know the Ulams and the Fermis and they considered the town very special indeed. I think that they felt like they were taking part in a historical process by living in the town at the time.

As events unfolded with the Berlin Blockade in 1948 then the first Soviet A-bomb test in 1949, Los Alamosans once again must have felt that they were in the midst of a desperate struggle of world-historical significance. Euphoria and relief after the war gave way to fear and concern over the future of the bomb. With U.S. policymakers operating on the assumption that a Soviet bomb was much further off and that the U.S. would enjoy a long period of unchallenged strategic dominance (this is remarkably similar to aspirations of today), the Soviet test came as a big shock and produced a panic, even if the panic was produced by unrealistic expectations, nationalism, and fear. During this period Oppenheimer would be discredited, largely by Teller personally, and stripped of his security clearance. In one of the most remarked-upon ironies of the nuclear age, the 'father' of the atomic bomb was soon banished from any contact with the research on the device he had once advanced. Through outright lies and an overactive sense of security as well as self-promotion, Teller vilified

¹¹⁷ My grandfather would later work in the Health, Safety, and Environment division of LANL in the areas of occupational medicine and health physics. My grandmother, who had been a nurse at the Los Alamos Medical Center, became the school nurse at Los Alamos High School, a position my mother now holds, after having worked in occupational medicine at LANL. She also works in the Emergency Room at the Los Alamos Medical Center, where she formerly also worked in the Intensive Care Unit and the Recovery Room.

Oppenheimer and called his personal and political values into question. This singular event produced a rift in which many of the Manhattan Project 'Old Timers' became incensed with Teller for what they saw as his unfair character-assassination of Oppenheimer. They didn't want anything to do with Teller after that, and his reputation in Los Alamos has been mixed ever since.¹¹⁸

Also at issue in the affair with Oppenheimer and Teller was the dispute over the hydrogen bomb. Oppenheimer was against the development of the hydrogen bomb as he wanted to limit the size of weapons in an effort to minimize destruction and killing. Teller, who was one of the scientists who theorized the hydrogen bomb during the Manhattan Project, was deeply invested in the realization of a project that he saw as properly his.¹¹⁹ Thus, Oppenheimer was

¹¹⁸ Although it should be noted that, given the frequent crossover in personnel between Livermore and Los Alamos, the number of Los Alamos scientists who have worked with Teller, and Teller's position as Manhattan Project physicist and long-time Cold Warrior, Teller has got plenty of sympathy, and of followers, in Los Alamos.

¹¹⁹ The section on 'history' of the Lawrence Livermore National Laboratory's website describes the founding of the laboratory:

The single event that triggered the establishment of Lawrence Livermore was detonation of the first Russian atomic bomb in 1949. Some American scientists were alarmed that the Soviets could advance quickly to the next step, the hydrogen bomb, with potential disaster for the West. Ernest Lawrence was a key participant in the World War II atomic bomb project at Los Alamos, a Nobel laureate, and founder of the University of California Radiation Laboratory at Berkeley. Edward Teller was a brilliant physicist at the Los Alamos nuclear weapons laboratory. They met in October of 1949 to discuss the Russian threat. It was essential, Teller came to believe in the course of the next several years, to start a second nuclear weapons laboratory—to provide competition, to diversify expertise, to handle the large volume of work that future fast-breaking discoveries would bring. Lawrence supported Teller's proposal for a second weapons lab, and he wanted it established at Livermore. Moreover, he wanted Teller to oversee setting up the new lab.

From <www.llnl.gov/llnl/02about-llnl/history.html> last accessed March 9, 2004.

an obstacle. Allegations of political malfeasance were combined with charges of intentionally delaying the H-bomb to imply that Oppy was trying to give the Soviets a strategic advantage. As Teller's enthusiasm for the H-bomb found a number of welcoming encouragers in Congress and in the military, there were those who were very interested to see that his plans would succeed. One Manhattan Project physicist who knew Oppy and Teller well and who stayed in Los Alamos said that although "those were troubled and difficult times, we were all trying to figure out what would come of these inventions and this science. But what Edward did to Oppy was wrong and it was selfish and we all knew it. We all knew how enthusiastic Edward was, but it was childish for him to let his personal ambition lead him to do that." In the Oppenheimer security hearings in 1954 and in Teller's participation in that debacle, we have undoubtedly the most famous story of the high-stakes physics jockeying at Los Alamos. Personal visions, careers and policy outlooks clashed to make for a dramatic event. Indeed this episode sets a pattern according to which many decisions in the security state are made by *crisis*. Rather than having an open and democratic debate, impossible given secrecy and security fears, courses of action would often decisively be set by crises which played out through the workers at Los Alamos. The Wen Ho Lee Affair can be seen as another of these instances of government by crisis.

In the 1990s there was the well-publicized case of the Argentine physicist Mascheroni who had spoken out critically about a lab laser project that he thought was ill-managed and scientifically shoddy. As the project was a major

money-maker for LANL, and one they were hoping to keep and to expand into the future, his comments were not at all received favorably in town, especially when his sentiments found their way into Congressional deliberations. He was subject to a round of censoring treatments. First, his reputation as a scientist was attacked and maligned. His statements lacked scientific merit and he himself was a mediocre scientist, it was alleged (here there is a similarity to Wen Ho Lee, as when Lee became controversial management and nay-sayers would describe him as a 'mediocre scientist'). In a town where science and the PhD are exalted, being described as a 'mediocre scientist' is quite a slap in the face. Then, as the Mascheroni episode wore on, he was fired and had trouble finding any work. He became a kind of town dissident for a time who was living there and still seen as a gadfly. At certain points, the vitriol directed at discrediting him even reached to the point of allegations that his loyalty to the U.S. was suspect and that he had likely been aiding Argentina in their fledgling nuclear program (again a parallel with the Lee case where ethnicity and former citizenship status became grounds for suspicion and accusation). I was on the debate team at Los Alamos High School with his daughter during this time and needless to say the family was deeply affected by the actions and allegations taken against him. If Los Alamos is a small town and a tight-knit community, imagine the effect of being shunned there. For Mascheroni as for Lee, being cast in a dishonest and unsavory way led to social isolation with a number of people in town either too scared or too angry or too distrustful to talk to them. Here is an instance of the social tension produced by the contradictory demands of state loyalty and

propriety versus personal and individual friendship and loyalty. Sadly, many Los Alamosans seemed to have accepted at face value the charges against Lee and Mascheroni and therefore felt that they had somehow wronged the Laboratory and perhaps the country. But, even among those who questioned the charges and still felt friendship for the accused parties, there were many who were *too afraid* to carry on social relations with the Lees, and perhaps with the Mascheronis as well. In a social system where everyone is being judged on their capacity to become a security risk, and where sacred oaths and privileges of the state are involved, remaining friends with a suspect individual could pose a risk to a security-cleared Laboratory employee. So there is a unique chilling effect on relations with the accused and shunned parties.¹²⁰

Aspects of the secret society—here a society protecting scientific secrets—and of the society of security have been integral to Los Alamos since its modern inception in 1943. In addition to being isolated and secret, the town was entirely fenced off with mounted patrols of the perimeter. Residents of the time describe having the feeling of living in an armed encampment.¹²¹ Those who lived here during the Manhattan Project and after tell many stories about sneaking in and

¹²⁰ Several facts bear noting. First, a number of families and people did remain friends with the Lees and trusted their personal loyalty and affective bonds with them. Even though it may have been politically or personally disadvantageous for them, they did maintain contact with the Lees and speak out on Lee's behalf, characterizing him as an honest and decent man. Second, many did succumb to their fear or suspicion and avoid all contact with the Lees. Members of the Lee family, including Chung and Alberta, were uninvited from town social events such as weddings. Although this social shunning against them was widespread and from many quarters, it is notable that several Chinese American families, who may have felt especially under scrutiny, cut off all contact with the Lees. However, other Chinese American families maintained contact and support throughout the ordeal.

¹²¹ Resonant with Giorgio Agamben's notion of the *camp* as important figure of modern society, for its role in death and its regulation.

out of the fence, or of trying to sneak people in or out in car trunks, and of finding other ways to push and alter these security rules, so perhaps there is also a social sentiment which bristles against the securitizing measures in effect there. Feynman himself was notorious for cracking safes and for sneaking out the fence then coming in through the gate, then doing this repeatedly until the guards were incensed. I don't know whether this kind of playful interpretation of the rules and security has survived so robustly until now, it may have been bureaucratized away, cracked down upon or given way to cynicism. In any event there were any number of prominent security measures in place in Los Alamos, and the gates and fences were the very symbol, not to mention the very material manifestation, of that until 1957 when they came down. My uncle has told me stories about how he and other friends used to drive together "down to some place in the Valley like Española where we would really rile up some guys and just when they'd start to chase us, why, we'd get back into the car and race back up the hill. When we got to the gates we went in and they couldn't pass through." Even now the old sites of the town gates are major landmarks, the 'Back Gate' by Bandelier and the 'Front Gate' on the Main Hill Road by the airport.

By all accounts the period when the gates were up made the town feel even more isolated—no one but cleared pass-holders could come into town. Thus, people here really were reliant upon one another for social contact and networks. Historian Katrina R. Mason explains how in early Los Alamos the "sense of safety and independence were heightened. Ironically, the work of the town, the development of bombs, created for the children a cocoon of security. The fence

surrounding the town kept out anyone who wasn't part of their carefully screened world. Everyone within the fence had been invited to live in the town and had been investigated. Everyone had a job and a house or apartment. No one could wander in from the outside. There were no traveling salespeople, no strangers. Everyone had been carefully vetted. Everyone belonged."¹²² The importance of the work in the town was underlined, as was its danger. The gated atmosphere was said to have made the place feel all-the-more military. It seemed just like a military base: fenced off and controlled. The residents, even the children, must have felt like they were part of the military. A friend of my mother's from when they were growing up in Los Alamos in the fifties says that they "always knew that what was going on around us was important stuff, even though we didn't hear about or understand a lot of it. The fences and the guards and the badges let us know that this was an area that was important and that was *under control*." She mentions not only the fences and the guards but the all-important *badges*. These are the indications of being a Laboratory employee and of being *cleared* to work with secrets and special materials. The clearance process consists of a rigorous background check which includes a check of every residence in which one has lived, a check of personal information and finances, extensive interviewing of friends and associates, and a series of questions about political party affiliations and personal habits including drugs, alcohol and sexuality. Applicants are required to affirm that they are "not and have never been members of the Communist Party or any party that advocates the overthrow of the government of the United States." They also have to specify each and every

¹²² Mason. P. 127.

instance of drug use and psychological counseling. The logic of security in force is that if an employee *has* committed some of these infractions, it is better for the government to *know* about them than to have them left dangling as potential levers for blackmail. In other words, they want to know the dirt on you before and more fully than everyone else.¹²³ Patterns of deception or untrustworthiness are worse than these infractions. Hence our oft-repeated instructions to employees under investigation for clearances, "It is better for you to list it than for them to dig it up during the investigation, it looks worse if you lied about it."

With an extensive background investigation and loyalty check like this a prerequisite for many jobs and thus life in the town, and in a place where security and foreign threat are the order of business, there is a distinct social compartmentalization introduced here by virtue of this measure of security. There could always arise a tension between loyalty to the state in one's job and friendship with a colleague who had been discredited or expediently put-down to try to control a crisis. As there is always this double possibility of small-town friendship and a primary loyalty to the state which makes all other relations distant and potentially doubtful, there is a kind of distance and reserve built into the also warm social relations of Los Alamos. A secondary effect of the security and the clearances is that *everyone is always watching everyone else*. Here the small town character reinforces this trait rather than acting against it. The small-town impulse to know everyone's business and to keep a watchful eye is compounded by the security imperative to defend state secrets and watch for

¹²³ This is the logic of the institution of confession as well.

possible threats. One's neighbor is one's neighbor, but could also be a security threat who poses a danger to the town's work.

In status-conscious Los Alamos, the clearance also becomes an object of ranking. Having or not having a Q Clearance is much like having or not having a PhD—it determines the entrance to a certain 'club' at Los Alamos. With a Q Clearance one can enter the 'cleared area.' But, as work at the Lab is further compartmentalized, much of it is on a 'need to know basis' meaning that a cleared individual should only learn about it *if* it is necessary for their official duties. The colors and the markings have changed on the badges over the years, but there are special areas, like the plutonium facility or other technical areas, which require a special insignia on the Q badge for entrance. My mother used to have the sought-after '8' insignia which meant that she was potentially authorized to be in *any* area of the Lab. As an emergency nurse with training in radiation accidents, she might be called upon to respond in any area.

With so many residents' employment and social status caught up in their official reliability and trustworthiness, there is a close eye in the town on behavior which might be seen to compromise these qualities. Alcoholism is not merely a personal lapse or an unfortunate situation but an indication of disloyalty and lack of control. Drugs indicate a willing violation of the law and a lack of control. Gambling represents a vulnerability that could be exploited in espionage. So the gossip about who is wearing what and who is up to what scandalous behavior is augmented by quips about who is and who is not a real scientist, and who might be a security risk. In such an environment, it is no surprise that church and civic

groups thrive. Membership and participation in these organizations shows that a person is subject to moral education (especially Christian or Jewish moral education) and is dedicated to higher ideals and to good works. Groups like the Kiwanis and the Civitans allow a bridge of the service organization and professional organization models in which these groups become both charity organizations funding state and local causes and means of professional networking. Both these organizations and others sponsor informal science lectures. Also, of course, the leadership of youth activities and organizations is seen as a sign of rectitude and social-mindedness, just as participation by the youth in these activities is seen as respectable and as proper training.

In an interesting shift since the Manhattan Project days, the incidence of large social events with lots of drinking and dancing seems to have greatly diminished and incurred more disfavor than it once did. Some who grew up here during and just after the Manhattan Project remember it as a "hard drinking town."¹²⁴ Histories of the Manhattan Project are replete with entries about parties at Fuller Lodge. The imaginations of some of these 'Old Timers' was fired even years later in remembering these parties. When I met Ruby and Edgar, two friends of my grandparents who had come to Los Alamos during the Manhattan Project and stayed there until the sixties before returning to Memphis, Tennessee, they told me that some of those parties at the Lodge were pretty raucous indeed, dancing on the tables, drunken arguments about physics and all. They then went on to tell me about some partying a few years later with my grandparents that put my grandparents in a much wilder light than anything that I had heard in my own

¹²⁴ Brent Calkin, quoted in Katrina Mason, *The Children of Los Alamos*, 122.

family. Talking to Edgar and Ruby made me feel more personally identified with my grand parents, as I saw a picture of them as liking to have a good time but also as a little wild and, perhaps, human. From this and many other accounts it seems that in the forties and fifties this kind of drinking and social interaction was widespread in Los Alamos. Now, there is a yearly New Year's Eve dinner, dance, and celebration at Fuller Lodge, and champagne is included as part of the event. But, it doesn't generate the same kind of stories, or perhaps the same kind of intensity, as those older parties. For one thing, the population has gotten older. Many of those young people who came here in the forties and fifties stayed here and now they are growing old. The Manhattan Project average age group of the mid twenties is probably the least represented age group in Los Alamos society today.

It seems now that, whether as a result of the change in age distribution of the population or of increased security measures discouraging public ostentation, this kind of public sociality is much de-emphasized now. There are, to be sure, a number of private alcoholics who keep more or less to themselves and their family who drink regularly and heavily. There are house parties of adults or of teenagers—the ones with teenagers, if they are large enough, stand a good chance of being found and busted by the cops. As a result, many of the town's youth drive up beyond Los Alamos into the Jemez mountains to hold outdoor campfire parties. As gatherings above a certain number of people in town are noticed and checked out, town teenagers in search of a release from the social strictures of Los Alamos life often prefer to go to the mountains for a feeling of

being beyond the confines and the authority of Los Alamos.¹²⁵ These parties can sometimes become quite raucous, as the feeling of being outside of the controls of Los Alamos leads to a feeling of license. At a party like this I attended that was a gathering of the 'Stomp' or cowboy clique of young Los Alamosans, three people were lit on fire when a drunk cowboy threw gasoline onto the open campfire. But, such extreme occurrences are rare, with the parties usually representing an opportunity to ease pressure of the everyday social life of the town. One Los Alamosan, Kelly, recalled his high school experiences of going to mountain parties by saying that they [the police] "always knew if you had a big party in town. They would see all the cars and the kids and they would just come right in. That's why we loved to go to the Jemez where you could just hang out in the beautiful forest and feel comfortable and be as loud as you wanted. And we had some big parties up there too, and once in a while they would get busted, but they were usually fine." This social event of the mountain party expresses not only the desire to *get out of Los Alamos*. It also actively affirms one of the main elements of Los Alamos life: *the forest*. These kids at the parties are not just interacting socially with one another but with the forest, which has a vast ecosystem and society all its own. The parties often include hiking and camping, and in general a desire to be in the forest and spend time there. It is noteworthy that these kinds of bacchanalian social events are pushed out of the town proper

¹²⁵ In the past years with the winning of jurisdiction up into the mountains for Los Alamos Police, this feeling of freedom has been encroached upon.

of Los Alamos and instead take root in the forest, where we are led to believe that such festivities were held long ago.¹²⁶

The seeming imperatives of security and of trustworthiness are often construed to extend to entire families in Los Alamos. If a parent has kids who are seen as rebellious or inappropriate in their behavior, for instance for taking drugs or having sex, then the parent's responsibility and stability are often called into question. A friend's father told her that he didn't want to see her name in the paper in the 'police beat,' and he didn't want her at parties because he was afraid that her behavior could influence his clearance. This assumption and this family credo were very common in Los Alamos—one should avoid bringing shame or controversy on the family. Especially since one 'weird' member could bring suspicion on the whole bunch.¹²⁷ Lab workers are often worried that one bad mark on their family will affect their promotion, their access to projects, and their trust from others. The 'police beat' is the first section of the newspaper that many readers turn to. A listing in there is always sure to bring several comments from friends and coworkers in subsequent days. The 'police beat' phenomenon as such is a combination of the small town drive to gossip with the security-conscious society of a government national security community.

Despite, or perhaps because of, the censure of these mountain parties by the 'good society' of Los Alamos, many youth continue to seek them out. In such a

¹²⁶ Of course the behavior of the revelers was often disrespectful to the environment, producing trash and tearing up copses and meadows where many motor vehicles parked.

¹²⁷ The catch with this is that there are nonetheless *so many* weird people in town, by virtue of their esoteric interest in physics and their eccentric social sensibilities and the implications of their work. There are literally some head-in-the-clouds types who seem to be endangered by any traffic around them while they are thinking about a problem. General Groves referred to the scientists as 'egg heads' during the Manhattan Project.

tightly-bound community with rigid social expectations, one can understand the draw in such organized rebelliousness. Living in a community dedicated to national security and rife with extensive security measures against their choosing, many youth there become very disillusioned with the mission of the place and with the academic and social expectations. The small size of the town and its isolation make some release even more sought after. These parties and other countercultural outlets form an alternative social space. Many youth experience it as one which allows them some respite from the intensities of their daily life. Susan, 24, describes the way that “the parties were places you knew you could go and have fun, where you didn’t have to talk about grades, or where, if you did, it was cool to get an ‘F’ and to make fun of the teachers. It was a little escape from that everyday family and school and family kind of thing that we were so tired of by then.” She also said that being out of town and being up in the mountains and in the forest lent a feeling of being far away, since “Los Alamos is definitely amongst the forest, and many of us had forest around our houses and it was by the schools. But when we went further up into the mountains, more up into the spruce and Ponderosa pine, there it felt even more like we were *in* the forest. We felt like we were far away from the supervision of our normal lives, the forest was so beautiful and calming.”

If these kids, not to mention other residents of Los Alamos, feel that they are under the eye of plenty of security, one can see why. Yibi Mark, daughter of Manhattan Project then post-war Los Alamos physicist J. Carson Mark, remembers that “it was so safe, that it never entered my head to think about it. It

wasn't that I felt safe and secure. It was that it had never occurred to me that there was any other way to be."¹²⁸ The town is small, and everyone is interested in your business. For my sisters and me, we could scarcely do anything around town which wouldn't be seen by or communicated back to our parents, grandparents, aunts and uncles, or cousins. We felt like we were always under observation that way. More than once (many more times in fact), I would do something that I would be questioned about in subsequent days or weeks by family members. In addition to the aforementioned background investigation process and the concomitant effect of encouraging observation of one's neighbor, there is a large and very zealous police force, there is a much larger force of Laboratory guards on the Protective Force, and there are U.S. Forest Service Rangers who patrol the Forest Service land which abuts Los Alamos County and Laboratory land at several places. And, since these jurisdictions overlap, there are a number of roads and areas which are patrolled by all three security forces. In addition, miles of Laboratory property is marked 'FEDERAL GOVERNMENT—NO TRESPASSING.' For us growing up in White Rock, all the land on the other side of State Road 4 was that Laboratory land, marked with those yellow no trespassing signs and others that warned of undetonated explosives, and it was off limits even though it looked so contiguous with our environment. Despite its proximity and its beauty we couldn't walk into that land or camp there. Of course that was the direction of the nuclear waste dump, so perhaps we didn't want to walk there anyway.

¹²⁸ Quoted in Mason, p. 131.

The job of physical security of the site is a job that used to be done by U.S. Army personnel during and after World War II. Now it is contracted out to a private security company. Nonetheless by contract these are government agents and they carry automatic weapons, use some armored vehicles, and include a Rapid Reaction Force meant to repel any attacks on critical nuclear or security facilities at the Laboratory. As with the guard force in general, there are a number of ex-military on this team. Some of them are from Delta Force or other special operations backgrounds. Trucks from the Laboratory guard force patrol around laboratory sites, hence around much of town where there are Lab sites interspersed, not to mention the 43 square miles of Lab property¹²⁹. Thus one constantly comes into contact with these patrols on any kind of casual and normal social routine in town. One also passes by sites, such as the Plutonium Facility, which have three barbed wire fences, guard towers, and a host of other security measures, on drives through some of the main roads in town. When the Lab became worried about terrorism in the 1980s, they first installed concrete barriers on the turnoffs to the Facility, then they moved the entire road out so that it would cut further away from the site of storage of massive quantities of Plutonium in the form of 'pits' which are the fission primary of a thermonuclear weapon. The road used to pass well within sight and firing distance of the Facility. This road on which the Plutonium Facility is, Pajarito Road, one of the 4 routes linking Los Alamos townsite to White Rock, its satellite 8 miles down the mesa, is also in its entirety on Laboratory land. Although usually a main thoroughfare, it is sometimes closed for security reasons. Movements of special

¹²⁹ The county, including the Laboratory, is 108 square miles total.

nuclear material or of massive equipment could sometimes account for this. Also, recently, when the country is declared to be at 'Orange Alert' level of terrorism threat warning, the road is closed off and they call out the armored cars and the heavy machine guns to station menacingly at the end of it.¹³⁰

As far the police force is concerned, the town is small and many of the adults are expected by their government employer (via University of California, or who knows?) to be upright citizens, so therefore much of the energy and vigilance of the police force goes into monitoring youth. Teenagers feel especially supervised. Often police officers will memorize and follow the cars of youth in order to try to find house parties or find out if a party is going on out of town. Murder is extremely rare (although guards are sometimes killed in training accidents), and there is some theft, assault, domestic violence, and automobile wreck, but by and large the police concern themselves with traffic enforcement and youth monitoring.

Everyday life in Los Alamos also entails working in or driving by various research sites of the Laboratory. In addition to the Plutonium Facility there are the Meson Physics Facility including the neutron scattering center (now the Manuel Lujan Meson Physics Facility), the criticality site, S-site, the computing facilities, the explosives testing area, TA-35 (Technical Area 35).¹³¹ Some of these seem like objects of scientific wonder (the computing facilities and the accelerator, perhaps) and some seem like objects of dread (the Plutonium

¹³⁰ And, recently, Pajarito Road has remained sealed off even when the national threat level went down to 'Yellow,' it is not anticipated to open to public traffic again.

¹³¹ The Laboratory is physically divided into Technical Areas which denote certain buildings or certain zones and usually correspond to a group or division carrying out work there, although sometimes they overlap and share technical areas.

Facility and the Criticality Facility). The construction of the buildings, though, often looks very plain. The Plutonium Facility (TA-55) is distinguished by its fences and barriers and towers and gates, but the building itself is a nondescript cinder block building painted tan. The Criticality Facility looks like a series of garages and utility sheds on a big lawn stretching back into a valley. It was, however, often illuminated brightly and for a few years had a heavy gun emplacement on the ridge above it. Many of the experimental laboratories or project centers look like large utility sheds, sometimes with special technical features included.

Seeing so many high security and high technology sites as a part of the everyday life of Los Alamos serves to reinforce the emphases on science and on security. As if people weren't aware enough from the security clearances, the fences and the guards underscore the securitization of the town. The Technical Area that one works in is also the subject of intense interest there, and of another status game and competition. It is almost as if personal and familial value is reckoned on the basis of the area and the research one is involved in. The operation of supercomputers and accelerators and the like in the town serves as a challenge to other scientists ('Can you understand the implications of *my* work?') and to the students ('Can you *comprehend* what we are doing here?') Perhaps one can say that the youth are measured not by the venerated American standard of doing better than one's parents, but by the doubt that they will ever approach or understand their parents' work.¹³²

¹³² Terry Rosen, another child of Los Alamos who has turned to historical and social exploration of the town and its residents, devotes attention to this motif of *whether or not*

It should come as no surprise that in a government laboratory town centered on physics with two thousand PhDs science is valorized to a great extent in social interactions. The jockeying for position and for money amongst scientists and projects at the Lab is part of this, along with a heavily scientific bent in everyday discourse, news media, and local government proceedings. Science and math courses are heavily emphasized in schools, and achievement in that area is especially lauded among students.¹³³ Let us say that, although there is also emphasis on languages and literature and social studies, these are not the fields that one is supposed to study at college.¹³⁴ It is all fine and good to be proficient in them and to do well, but science is seen by and large to be the real road to honor and success. For one friend of mine, Erica, the decision was a difficult one since “my father told me that he’d only help me in going to school if I studied physics or molecular biology, and only if I went to UC of course.¹³⁵ He was glad that I did well in English, so that I’d be a well-rounded student, and that I liked poetry, but he did *not* want me to be wasting my time on that in college. A good elective or two, maybe, but not for a career. He saw English and a lot of fields he associated with it as intangible and unfocused, not really having much purchase on the real world.” Erica’s situation represents one that exists for many

the children of Los Alamos would be able to measure up to their parents in his book *The Atomic City* and in his forthcoming *Fallout*, which traces the life stories of Manhattan Project Los Alamos children as they ventured out into the world beyond the fences.

¹³³ The Advanced Placement Physics course at the high school was taught by a Laboratory physicist who had done his doctorate with Feynman at Caltech.

¹³⁴ As in many communities with similar demographics, there is a strong pressure for the youth to go to college.

¹³⁵ As Los Alamos has been operated by the University of California from 1943, kids of Laboratory employees could enroll in the UC at in-state tuition rates. Thus a great number of students from Los Alamos would head to the UC every year. In my senior class there were 8 admitted to Berkeley, 8 who went to UCSD, 8 who went to UCLA, etc.

young Los Alamosans: from a town that is centered on and glorifies science, how can one *not* study science and desire to be a scientist. More than that, learning from home that science is that which dispenses with mysticism and deals with the way things are and the rules of the universe, how could one decide to go back to this mysticism and unreality?

Another such situation faced another family in town. Here the parents were scientists and the daughter was skilled in both mathematics and in music. Music was encouraged both for the social capital of knowing how to play and play well and because the similarity and resonance of mathematics and music was assumed to be borne out and further exercised here. This daughter continued her good work and diligence in both areas in high school. When she started to contemplate college, she wanted to study music there, as her great passion. The parents were crestfallen. They were very pleased to have such an accomplished musician in the family, but they had always assumed purely and simply that she would study math. To them, studying math primarily and music secondarily provided good, marketable science skills combined with a pleasant pastime and activity. Studying music first and math second seemed a recipe for poverty and the squandering of a truly beautiful mathematical gift. With the daughter deciding to major in music, and very avidly, whilst minoring in math, the parents were concerned and disappointed for a few years.

Financial and Professional Security

While we saw a bit earlier on that many scientists were lured to Los Alamos by the desire to pursue top-level high technological science in some cases, or by national security and state secrets in others, there are a number of scientists who came there because of the financial and professional security that it offered. They would be employees of the University of California, the pay was good, housing and schools were good. Taking a job at the Lab seemed to spell out stability and security for them and their families. When asking about life stories and motivations to come to Los Alamos, one hears this aspect over and over again, and often combined with the other motivations. The physicist who taught at a top level research university but came to the Lab for better equipment also got paid much more which helped with his young family. Others teaching or researching at universities (or unable to get jobs at universities) or working in industry found higher pay at Los Alamos. One prominent physicist, who also had been teaching physics at a college before coming to the Laboratory, told me that defense science had paved the way for his schooling and his career. He and his wife told me that they said:

Thank god for Sputnik. As the Sputnik launch had just taken place, I had my pick of scholarships and fellowships to study physics or engineering in graduate school. I could just pick between all these phenomenal offers. And, after I finished my PhD, I found I could get a job with Los Alamos. (his wife) Yep, that's why we said 'thank god for Sputnik,' with everything going on in those years science and engineering were being heavily supported and it led to a number of opportunities for Matthew.

One frequently hears accounts in which the opportunity to work at the Lab was not only recognition, but good fiscal sense. Another physicist said that when he “weighed up the salary, the quality of the schools and of the town, and those beautiful views of the mountains, it just seemed like it was the best life that I could give my family.” Again and again one hears that it provided parents the ability to set up their families in security and in comfort.

Others grew up in or around Los Alamos and wished to remain or to move back, and the Lab offered the best opportunity to do this. If these people are close to their families or to the place *as a place*, then often a life of working at the Laboratory is a natural step. My mother had grown up in the town, but had been gone since going to college at University of New Mexico in Albuquerque, after which she moved with my father to California (where he was working on the Diablo Canyon nuclear plant for Pacific Gas and Electric), then Texas (where he was working for Brown and Root on Commanche Peak nuclear power station). When the possibility arose, my father was motivated to go to work for Los Alamos because of the national security implications (he had been a combat engineer in the Army Reserves), the prestige of the science, the fact that my mother’s family was there, and to best provide for his family. My mother was motivated by returning to her hometown where her parents and siblings lived and by providing an upbringing like the one she had known to her children. A number of friends and acquaintances of mine from growing up would either begin working for the Lab when we graduated from high school or they would find their way back there after different spans of education. One friend of mine from growing

up, a few years older than I, said that she loved northern New Mexico, and that she didn't want to settle anywhere else, and that, being close to her family she wanted to be near them. Working at the Lab after college at New Mexico State University in Las Cruces was the best way for her to do that.

The land and culture of northern New Mexico is another big factor in enticing people to Los Alamos. Some, like my grandparents, come here as adults then are so stricken by the place that they decide to settle and stay. There are a number of accounts of families who had been living in a city and were drawn to Los Alamos for the air and the land of New Mexico which they thought would benefit their kids. A number of Los Alamosans who had, like my mother and uncle and aunts, grown up here then left then returned, were motivated to come back because they thought that the environment was more salubrious for their families. It seems that the notion of a healthy, robust climate has long been attached to this place—that was the original reason that Oppenheimer was there, and that was the thinking of the boy's ranch school there prior to the Manhattan Project.¹³⁶ The forests and the streams and the mountains and the air of New Mexico are reasons which come up again and again in the list attractions to this place cited by Los Alamos residents (not to mention other residents of New Mexico).

But New Mexico isn't unique only in terms of its topography, its cultural life and history are distinct and fascinating. It is a dense layering of colonialisms which shows the negotiating process of U.S. nationalism underway, with lands

¹³⁶ See Aldrich and Wirth, *Los Alamos: The Ranch School Years 1917-1943*, Albuquerque, UNM Press, 2003.

and peoples incorporated or annexed into the United States despite their ambivalence or opposition to it.¹³⁷ Immigrants to Los Alamos often report feeling both keenly interested and intimidated by the unique ethnic mix in New Mexico. Los Alamos fits gingerly here because, despite some diversity (mostly scientists from around the world and their families and Mexican American and American Indian employees of the Laboratory), Los Alamos is a very white town amidst an area which is majority non-white. In terms of average socioeconomic status, Los Alamos is much above most of the communities of northern New Mexico and New Mexico in general and there is considerable tension about the situation. Leah, a student from Española High School, about twenty miles from Los Alamos (and early site of the Spanish colonial administration in the territory before Santa Fe) described how “we were always working at school and at activities, but it was also so obvious to us that a lot of our facilities and our resources were really limited. I mean, between Española and Los Alamos, where do you think that they are going to really encourage science fair and band?” She gives voice to a recognition and resentment that is widespread in northern New Mexico. Los Alamos is special and smart, but it is so because it is rich—and it is rich because of massive federal government funding.

Matters are made worse by common defensive reactions or well-meaning blunders by Los Alamosans seeking to defend and legitimize their presence. As the Lab is an object of controversy both financially and politically, there is a desire to present the good side of the work there. In light of the poverty of

¹³⁷ A brief outline of this history is provided in the chapter on Colonialism of New Mexico.

northern New Mexico, Los Alamosans often maintain, as one couple expressed to me very succinctly, the conviction that the Lab “is the best thing that ever happened to northern New Mexico. It brings so many jobs here that wouldn’t be here otherwise and raises the standard of living for a lot of people from towns around here.” While motivated by a desire for more socioeconomic opportunity and parity, it is easy to see how this line of thought is patronizing. It is also evident enough how it is problematic because it already sees in northern New Mexico a *problem* or a *riddle* to be solved and because it assumes that there was *nothing going on there before*.

The tensions between northern New Mexico and Los Alamos are played out within the town as well. While there are a number of Mexican American and Indian residents in the town, and even more who commute to work there on a daily basis from nearby towns and pueblos, there are a number of cultural sore spots and sticking points which continue to affect life here. Much of the tension here is undoubtedly historical, the legacy of the history of successive waves of colonialism which have influenced this land. From this vantage, while there is also a pronounced syncretic and mestizo tradition in the area, the Indians are still resentful of the Spanish and the Anglos for coming to claim this land. Both the Indians and the Spanish and Mexican Americans, as well as whites from the American annexation and settlement of the territory, are often scared and angry

about all the nuclear and military industry which has propped up the state's economy since the end of the war. Complicating the picture is not only the fact that these populations are substantially crossed over, but also the structural factor that thousands of New Mexicans, regardless of their ethnic identification, have found work in the defense sector and thus made it part of their personal horizon and political conviction.

Just as scientists were brought into Los Alamos during the Manhattan Project to fulfill the needs of the mission there, so too were many and varied laborers from nearby towns and throughout the state brought there. While the Army provided some of each, the great need for skilled construction workers to build houses and research facilities and for machinists and technicians to perform tasks crucial to the research at hand drew in many New Mexicans. One such early Los Alamosan who would go on to work at the Lab and at the Department of State was Dimas Chavez who was "born in a farming and ranching village behind the Sandia Mountains, a little town by the name of Torreon. My father was a farmer, rancher."¹³⁸ He explains how "in the early 1940s there was quite a drought...Dad went to Santa Fe looking for employment as a laborer...We moved to Los Alamos in August of 1943. I was six. My father was offered employment as a heavy-duty operator."¹³⁹ A number of families like Dimas' found themselves moving from other towns in New Mexico to Los Alamos. As a part of a Spanish ranching community, the Chavez's found themselves changing over into some of the new employees of national security institutions in New

¹³⁸ Mason, p. 165.

¹³⁹ Mason, p. 164.

Mexico. Despite the fact that a number of laborers were hired in circumstances like that of the Chavez's, Dimas still felt ill-at-ease when he originally came to Los Alamos, as "for some reason in the early years, there were few Spanish-speaking students or residents. There were numerous Spanish-speaking personnel who worked there, but they all commuted from down in the Rio Grande valley." Upon moving to Los Alamos, Dimas felt his family to be a minority, both in terms of their Spanish heritage and in terms of their educational and professional status.

Dimas Chavez' father finished the tenth grade and his mother the sixth grade. When he moved to Los Alamos he felt out-of-sorts, too, because he spoke only Spanish at the time and suddenly found himself in a community where English was very much the dominant tongue. After he learned English (he says that his mother traded New Mexican cooking instruction for English lessons for him with some of the other wives), Dimas found school to be an ongoing challenge in this strange town because "all of my peers came from very well-educated families. My goodness, to teach you mathematics, who better than your father, Enrico Fermi? I didn't have that luxury. I always had to do double time. I always had to be in overdrive in order to keep up. Los Alamos was—and continues to be in my opinion—an area you either like or dislike. There is no in-between." He was intently aware of the unusual setting and pressure in Los Alamos. As a result of the kind of expectations and competition that he witnessed there, Chavez opines that "there's been a lot of great families raised and a lot of broken families just because of that—people not being able to adjust to that kind of confinement and

regimentation.”¹⁴⁰ It seems that he realized that his challenges as a youth there were motivated by being part of a small society that emphasized intelligence and expected a great deal out of its students. Into his adult life, when he decided to go to college after working at the Laboratory as, among other things, a forklift operator, Dimas described how he was saddled by a fear that he wasn’t capable academically.

Disability in Los Alamos

The fact that Dimas Chavez’ sister Dolores was born with Down syndrome may also have affected his view of a town that so highly prized academic achievement and scholarly intelligence. After completing college at Eastern New Mexico University, Dimas’ would make Los Alamos history in a Laboratory job where:

because of my sister’s handicap, Down’s syndrome, I developed the first program at Los Alamos Laboratory for the handicapped. I obtained the first security clearance for a mentally handicapped person at the Laboratory, and through those efforts and Special Olympics, the Laboratory was awarded the Employer of the Year from the Association of Retarded Citizens, and I accepted the award for the Laboratory director. One of our first Down’s syndrome employees at the Lab is still working there.¹⁴¹

Coming out of his unique personal and family situation, Chavez became interested not only in working at the Laboratory and furthering its scientific mission (he would later describe his elation—the feeling that he had surmounted

¹⁴⁰ Mason, p. 165.

¹⁴¹ Mason, p. 167.

his childhood fears of not being able to cut it—when the State Department sent him to Los Alamos years later to give a technical presentation), but also and especially in furthering inclusion and social justice there.

Indeed the fate of the disabled is vexing enough in Los Alamos: to begin with the society at large of the United States has been largely unresponsive to difficulties and issues facing the disabled while in a small community venerating the ideals of high education and brilliance, it is easy enough for them to be swept by the wayside or to be pitied.¹⁴² My younger sister Wendy, born about a year and a half after I was, encountered these attitudes and treatments in growing up. Born in Los Alamos while my family was staying with my grandparents there while we were moving to Texas, Wendy was born with a cleft palate and with some mental developmental disability.¹⁴³ While the birth of a disabled child frequently triggers initial reactions of disbelief and of regret from the parents, one can imagine how this response has its particular context in Los Alamos, where there is a tendency to think that this child will never win the Nobel Prize or figure among the top rank of scientists. Compassionate as this small town may be (contrary to expectations of many outsiders for a town dedicated to such

¹⁴² Notwithstanding advances made in the closing of brutal institutions like the Willowbrook State School and the increases in accessibility accompanying the Americans with Disabilities Act, American society has a long way to go to truly begin to recognize and promote people with disabilities.

¹⁴³ Some researchers believe that there is a correlation between exposure to ionizing radiation and cleft palate. Ward Churchill reports that incidence of cleft palate was virtually unknown among the Navajo before uranium mining on the Navajo reservation. In the last decades numbers of babies born with cleft palate has increased massively.

weapons), this situation is a rub where families are never quite sure what to do with disabled children who can't be fit into the dominant mold of expectations.¹⁴⁴

When we moved back to Los Alamos when she was four, Wendy began a long process of negotiating the experience of 'being different,' as she puts it. Her situation, like so many others involving special education and special needs services, illustrates the frustration and difficulty posed by trying to identify students according to their disability and bringing them together into a special class environment where students of all manner of disabilities are combined. These different disabilities and conditions don't necessarily have any physiological, behavioral, or social commonality between them, and students have varying regimens of medicines or activity. Yet, even where all these different challenging students are grouped together, resources are usually scanty and strained and there aren't enough teachers.¹⁴⁵ Over the span of her education, Wendy would often be 'assessed' in an attempt to better classify her case and thus to better set her needs and conditions. Yet, like her fellow students, Wendy had a set of strengths and skills and capabilities, albeit one that didn't entirely coincide with the dominant track of education. She was able to take a combination of special education hours and regular classes, and the

¹⁴⁴ This problem of 'lack of place' mirrors that which exists in U.S. society more generally, in Los Alamos there is a particular version of it due to the isolation and the economic and social profile of the town.

¹⁴⁵ As school nurse my mother is now responsible for the health and well-being of the disability students attending Los Alamos High School. While feeding these students, giving them medicines, and guaranteeing proper exercise for them could be a full-time job in itself, all these tasks are merely added onto her other duties as school nurse (attending to sick students and staff, enforcing vaccination laws, giving health presentations in classrooms, etc.). While the number of disability students at LAHS has increased after the ADA, corresponding funding for more teachers and more nurses has not followed suit.

question of her competence and limits was often at issue. Like Dimas himself and like some of the Lab employees he later helped, Wendy went to college at ENMU (this time the Roswell campus instead of Portales where Dimas had gone) for an associate's degree program for special needs students, then returned to Los Alamos to work at the Lab and at Johnson Controls, Inc., which held the contract to provide general services to the Laboratory. Unfortunately, the college program seemed to show the pitfalls of earlier educational experiences, only more intensely. Not only did the program lack the resources for adequate teaching and supervisory staff for students with need of assistance in eating and bathing and other personal tasks, the added sense of freedom from being at college gave many of the students a kind of open independence which was dangerous for them.¹⁴⁶

Theft was common among the disabled students at ENMU, and fights often broke out between the students.¹⁴⁷ As the program didn't have adequate resources, they also lacked the kind of instruction and support in studying which would have behooved the students to adapt to the new environment at college. With lots of time on their hands and little supervision, these students often took to

¹⁴⁶ Bringing students of varying levels of independence and social skills into a situation where they are not adequately supervised makes them vulnerable to opportunists from the nearby community. If the problem at institutions up until the 1970s had been the incarceration of the disabled and their sequestration even from their families, rendering them vulnerable in many cases to corrupt staff, here there is a different problem where the students are encouraged to be independent but in the process are made vulnerable, both to school staff and from outside community members, such that some of the same activities happen in each kind of institutional situation.

¹⁴⁷ Mirroring the kind of endemic problems of institutionalized theft and profiteering seen at institutions such as Willowbrook, theft of clothes and goods (for organized resale and profit) of disabled students remains a problem at some schools and residential service organizations.

interacting with Roswell society more generally. Given the socioeconomic situation of Roswell as a ranching town with an airport and a military school and, of course, the alien industry, and the social skills of some of these students, the results were mixed and sometimes shocking. Several of Wendy's ex-boyfriends have since been sentenced to the state penitentiary for car theft, arson, and armed robbery. After finishing an Associate's Degree in Roswell, she began a several year stretch of moving back and forth between Los Alamos and Roswell, sometimes working at the Lab but often yearning to live in Roswell. She eventually stole money and wrote hot checks to run away from our parents' house and make her way to Roswell where she would become pregnant from a man she had never met before (Robbie) but with whom she had arranged the affair with the intention of getting pregnant by telephone before leaving Los Alamos. Although she did not at the time have a job or a home, she was adamant about keeping the baby. In fact, when she was having her baby in Roswell, the police came into the delivery room to arrest her boyfriend Kyle who had an arrest warrant out for arson. In Wendy's particular experience, the outside to the 'confinement and regimentation' of Los Alamos mentioned by Dimas Chavez was represented by Roswell, which became the symbol for independent existence outside of Los Alamos.

When Wendy moved back to Los Alamos several times between college and other times of living in Roswell, she for several years held her job at the Lab. While she made good money and benefits, some things about the job rankled her. For one thing, she was acutely aware how much many of the other

employees and the managers saw her as 'different.' This is something that had always been an issue for her. While she would accept the label 'different' and use it to describe herself, the valence of the way it was said and understood was crucial to her. She has always resisted the label 'retarded' and would vehemently oppose its application to her. As she had gone to school throughout with some students who were severely mentally developmentally disabled, and often referred to as 'retarded,' she distanced herself from them on the basis of her speech and writing and social sensibilities. While at the Lab she was often angry because "everyone is just treat me like I'm so different. Some people is nice and my friend, but some is like 'oh, she's special and she works here.' And my job, it sucks, it's only like 'file, file, file,' or 'copy, copy, copy,' so boring." Compared to this Roswell seemed like freedom to her, so she ran away there and moved there several times. While, according to a conventional logic in town residence and work at Los Alamos was ideal—she could be gainfully employed and secure and socially integrated into the industry and social network of the town, that job and that arrangement were at odds with some of her impressions and choices.

The Pueblos, 'The Valley,' and Los Alamos

The tales about the pueblo women, especially from San Ildefonso and Santa Clara, who were hired as cleaning ladies in Los Alamos during the war are an integral and oft-mentioned part of Manhattan Project history. As many of the

wives of scientists found themselves also working in various capacities at the Lab, these pueblo women took on crucial duties of home maintenance and of childcare. Their participation was so crucial that the Army began running a daily bus from San Ildefonso Pueblo each morning to Los Alamos, and back in the evenings, to carry these women. The fact that these women and other workers from the pueblos or from towns like Chimayo and Española played major roles in Manhattan Project Los Alamos, and that they were relatively simply allowed to pass the security controls, often without background checks or other investigation, is an index of the degree that the federal government viewed and treated these citizens as loyal Americans who were highly unlikely to endanger the safety and secrecy of the project. While other ethnic minorities were or would be singled out as likely threats to national security, these groups in northern New Mexico were seen as loyal Americans. Parallel to this, much has been made of the Navajo soldiers known as Code Talkers who communicated in Navajo over Army radios thus providing an unbreakable encryption. The Axis powers lacked the requisite knowledge and experience to be able to comprehend this code, and the ability to 'crack' it mathematically will probably remain impossible regardless of the sophistication of computer technology and computational linguistics.

Just as with others who came to work in Los Alamos during the Manhattan Project, some of these New Mexican families stayed on after the war and others did not. But, as with so much else in the town, patterns which were established during that time have continued to structure the social life of northern New Mexico. While the daily bus service run by the government may not still exist, the

hiring of Pueblo or Latina women from 'the Valley' to do domestic work in Los Alamos has continued. One such maid, Luanna Gonzalez, told me that "it is a great opportunity for work. I have about seven houses in Los Alamos that I clean either once a week or once every two weeks. Those folks up on the hill are working hard at the Lab, and they don't have no time to devote to all the housework. They are glad to pay me and I am glad to do it. My mother used to do this work too and she made a good living at it. She raised up us kids that way and bought us clothes and everything we needed." For Luanna, as for many women of 'the Valley' and 'the Hill,' this situation provides a source of income or of assistance and a means by which social and economic ties are formed between Los Alamos and other parts of northern New Mexican culture. Women on 'the Hill' who work part-time or full-time at the Lab appreciate the help with home tasks and the women from 'the Valley' are able to find a means of steady employment. Luanna explains that "in Los Alamos they have the money, but they don't necessarily have the time. In Española, not so many people hire us to have their house cleaned, so we go to Los Alamos. A lot of money comes into Los Alamos, but it benefits a lot of people. I clean houses there and my sisters and my nephew work at the Lab." As a major institution and a complex social system, the Laboratory does affect the lives and the culture of northern New Mexico according to these kinds of networks.

While many of the house maids as well as the cleaning staffs of both the Laboratory and the Los Alamos schools are indeed Indians or Mexican Americans from 'the Valley,' the division of labor does not absolutely break down

upon these lines. If it is an ethnic and community division of labor, it is also a class one. Those who work in these jobs are often those without technical degrees or skills which would enable scientific work. Veronica, a maid who lives in Santa Fe, divides her work time between Santa Fe and Los Alamos. She cleans the houses of Lab employees in Los Alamos and of entertainers and real estate agents in Santa Fe. While Veronica is white and grew up in Pennsylvania, her husband is Mexican American and works at the Laboratory in a non-scientific position. She cleans for those "who are too busy or too irresponsible to do it for themselves. Mostly in Los Alamos it is folks who are working too much and not cleaning up. In Santa Fe it is a mix, some are just partying too much and doing too many drugs to pay any attention to their houses. But it works out well for me because I am good at cleaning and I can help them all keep things up." She finds a niche cleaning which enables her to support her family well along with her husband. She too, like Luanna, finds this availability with those who have more income.

While Los Alamos is recognized as a source of employment and opportunity in northern New Mexico, tensions persist in the ways that stratification and social class are expressed within the Laboratory and between Los Alamos and other towns. Though by no means universally the case, a disproportionate number of the Indian and Mexican American employees of the Laboratory work in clerical, administrative, construction, or technician jobs. While these jobs are often viewed as valuable opportunity and income, some of the workers holding them

are disgruntled by the feeling that they occupy a 'second class'¹⁴⁸ position at Los Alamos:

I am happy working as a machinist for the Laboratory. I like to build things and here we work with machines and materials that are unique. That aspect of the work is really great. What bothers me sometimes is that, as a Spanish person, people will treat me automatically like I am less or I am stupid. What I do is challenging and the physicists could not do it, I guarantee you. But, around the Lab I'll get treated like I am just there to help out raking leaves or something. Since so many of the scientists and engineers are white guys, and so many of the machinists and techs and secretaries are Spanish, a lot of people just assume that we are less important to what's going on.

John puts his finger on a major structural element of Laboratory life which leads to ongoing tension. The fact that there is a class and ethnic divide in tasks and authority at the Lab leaves many feeling that there is a persistent problem of social justice.

Many employees are disillusioned by situations like the one described by John. They feel that they perform valuable tasks at the Laboratory but that their labors and their contributions are undervalued or ignored. Steve Montoya, a clerical worker at the Lab, explained how:

¹⁴⁸ The structure and the feeling of class stratification (which also broke down largely upon racial lines) has historically been reinforced by the fact that the bulk of the scientific staff of LANL work for the University of California while a number of the custodial, construction, and technician employees have worked for contractor companies like the Zia Corporation, Pan American, Johnson Controls, and the like. On March 17, 2004, LANL announced a major reorganization under which many of these contract employees are slated to become University of California employees by November 2004. Some, such as Manny Trujillo, head of LANL's University Professional and Technical Employees Union, have hailed the change as one which will help to cut down the class division perceived to be at work in Los Alamos job ranks. See Adam Rankin, "Workforce at New Mexico's Los Alamos Laboratory to Grow in Restructuring Effort," Albuquerque Journal, NM Knight Ridder/Tribune Business News, March 17, 2004.

Our job is strange. If we do it right, we are almost invisible, just doing these things that they think of as background. But, if they are unhappy with something and they think that it is out of place or messy because of us, then they feel free to tell us so. And a lot of times it is not so respectful, more like a command. So that is the problem, they see the position as menial and treat us that way. If they like the job, they don't notice, if they don't like it and complain, they treat us like dirt.

Steve expresses a sentiment that is not at all uncommon at the Laboratory.

Steve is grateful for his job at the Laboratory, since "it pays decent, and I get benefits for me and my family," but feels run down by an environment where he is treated with low esteem.

Other employees find themselves in the position where they have more responsibility and authority, but are still negotiating ethnic perceptions at work.

Renee, a Mexican American from Española is a manager in security at the Laboratory, and often finds her actions and her authority questioned, she thinks, because of her ethnicity.

I supervise the process by which foreign nationals are approved or disapproved for visits to the Laboratory. And, we decide where they can go based on security and classification standards, and what kind of escort they are going to need. We have to be tough and demanding on this process, obviously. Now, a lot of times I tell scientists or program leaders that they have to do better, or that someone they want is not allowed. There are then a lot of times when they tell me, and especially the white men, that I must be wrong, that clearly I don't understand the security rules, that I don't understand the science, or that I am acting on authority I don't have. In many episodes I think that it is because I am Mexican and a woman and short. If another security manager tells them, a guy who is about six foot and white, they accept it or they just gripe some but they don't question his job and his authority and his

intelligence the way they do to me. Behind it I think is the confusion that if I look like I do I should be a secretary or an assistant, not a manager.

As a manager Renee feels a tension between her position and the work she does versus the perception of her as a woman from the Valley who must be a lower-level staff. It, "makes it harder to do my job. I have a lot of work to do, a lot of cases to look into, and I feel like I have to do another job trying to join this club that is white to be accepted and respected as a manager." As the social class and ethnic stratification begins to change at Los Alamos, those like Renee find themselves in situations where they feel fortunate and also put upon. Unique difficulties of negotiating impression management and social expectations come to light.

In addition to those who live out of town but work at the Lab, there are those who are born and grow up in Los Alamos who find themselves negotiating similar situations. They also encounter conflicts in expectations based on their ethnic identities and their upbringing in Los Alamos. Jenny Rodriguez, who was born in Española but who grew up in Los Alamos, found herself feeling like she was between two worlds, even though they were so close geographically.

I didn't fit in anywhere. In Los Alamos, although I grew up here and went to elementary school through high school here, I always feel strange because I am Mexican. And especially I feel that it is seen as weird that I am a strong student who does well. So people are always seeing me as Mexican and expecting things because of that. While in Española, where my dad still lives, I feel like I stand out because I am from Los Alamos, and since Los Alamos is so white people in Española think that I am almost white.

Jenny negotiates between expectations and assumptions that make her feel out of place. Her situation shows some of the ongoing friction over ethnicity and power in Los Alamos.

Jenny and her sisters, also raised by a single mother, felt that they were challenging some of these perceptions and expectations during much of their youth. For her "it was a great childhood and a great place to grow up. We got a really fine education and you could benefit from it. Being around a lot of really smart people and in an unusual community was an interesting experience for growing up. But, at the same time, I was aware of my skin and my last name since that always seemed to be an issue." Like a great many children who grow up in Los Alamos, Jenny describes her experience there as highly formative and educationally beneficial. But, like a smaller subset of Los Alamos youth, she felt marked by her ethnicity there. Like Alberta Lee, Wen Ho Lee's daughter, she was both able to join the white majority, but also always held as different. The emphasis placed on their skin and their names would prevent them from fully joining the there unmarked category of whiteness.

Other Mexican youth who grew up in Los Alamos also report feeling that they were less-encouraged academically and that less was expected of them by teachers and by other students. Eliana Gonzalez, who was born and raised in the town, was very popular and did well in school. But, she says that "I was expected just to be pretty and cute by a lot of people who didn't expect me to be smart. When a lot of the students around me, boys and girls, were getting especially challenged on the math and science, I felt like some of my instructors

took a different standard for me. I got by fine there and I did well, but I fought a lot to be who I wanted to be in addition to who *they* wanted me to be.” For Eliana as for Jenny, being a Los Alamosan meant high standards and good education, but being Mexican meant being expected to be less exceptional. They felt a double-standard that spoke to the status stratification between white and Mexican in the town.

American Indians often feel the same kind of disparity there. Some live in the town and some also commute there for school and work. For Pablo, a student who commuted to school in Los Alamos from the San Ildefonso Pueblo, he “felt like I was crossing between two worlds separated by a hill and a few miles. I was grateful for the chance to go to school in Los Alamos, but I always felt like I was a little bit set apart and on display. I did well and I got good grades. The kids from the Hill thought I was poor and disadvantaged, the kids at the pueblo thought I was lucky and rich.” Despite the proximity and cooperation between these towns and cultures, there remains a social separation between them. Los Alamos bears the marks of its place among the American and nuclear colonization of the area.

Another student felt like he was also always engaged in negotiating this dynamic. Miguel Santistevan grew up on the Hill and felt the same kind of double identity described by others like Jenny and Alberta:

I was good at school and I took Algebra in middle school and Calculus in high school and all that. I was good at school and part of the smart crowd, I knew all those kids, but I always had these other issues because of my name. I tried to defuse some of the

tension around that by being funny, by making some jokes to get people to trust me and to smooth things over. Like for instance, when the Calc teacher asked if we had any questions, and I said "yeah, where do babies come from?"

In growing up Miguel felt like he had opportunity and high expectations mixed with some conflicting impressions and expectations based on his ethnicity. This is a recurrent motif for non-white residents of Los Alamos from 1943 on: they were part of a unique culture and felt so, but they at the same time felt marked as different and as distinct in some senses.

The situation as regards ethnicity in Los Alamos is complicated. While there are those who come from Chile, Argentina, France, Germany, Japan, Israel, Italy, Switzerland, China, Korea, and lots of other places, nonetheless most of the scientists are white. While there are many Mexican American residents, and many more who commute in from nearby towns, they are a minority in this town which is very white in terms of ethnic makeup and culture. There are African Americans and South Asian Indians but only a few. There are more Chinese and Korean and Japanese Americans, but still not many compared to the overall population. Not only is most of the population white, the dominant cultural traditions are clearly white ones. Alberta Lee is astounded that "the place is SO white, and we were so whitewashed by living there. I mean, we knew other Chinese and Taiwanese families for sure, but so much of our everyday life in Los Alamos was with white friends and fitting into white standards. That is just how I learned how to be. When I went to UCLA it was such a trip to be in this country but be around so many Chinese." Alberta's experience is echoed by others.

African Americans in Los Alamos

Clayborne Carson, now a professor of African American history at Stanford, grew up in Los Alamos in the 1950s, moving there in 1949 and leaving in the early sixties. As one of a handful of black people in town, Clayborne experienced the situation as a mix of open acceptance and hurtful racism. As such he describes a sensibility of double consciousness referenced by other non-white residents of Los Alamos. In reflecting on his upbringing there in Katrina R. Mason's excellent oral history *The Children of Los Alamos*, Carson explains that "if you think growing up in Los Alamos was special for white kids, that was many times truer for me. My upbringing made me totally exceptional as a black person. It set me apart from just about everyone."¹⁴⁹ Carson was, like his contemporaries, aware of the special attributes of the town and the concentration of highly-qualified and highly-driven people. He felt that he benefited from the school and community there. He felt the particularity of his situation where:

(my) dad was not a scientist. He had not gone to college and we did not have a lot of books around...and here I was going to school with all these kinds of scientist's [kids]...The school had well-motivated students, bright, disciplined...I remember school as a positive experience...I knew I was pretty bright, but it took a lot to stand out, particularly since I was interested in math and science. I had a fascination with that area, and there were some precocious kids.¹⁵⁰

¹⁴⁹ Mason, p. 158.

¹⁵⁰ The ellipses are in Mason's original.

Carson's estimation of the situation in this respect is not unusual, and seems to characterize the academic situation for kids in school in Los Alamos from his time on up until today. While encouragement and pressure to do well from parents are not unusual, and academic competition among students is a common enough story, especially among upper and middle class communities in the United States (if not the world over), this setting of a small town so characterized by so many specialists in esoteric math and physics made for a unique environment where school success in general, and acumen in science and math in particular, are strong social values.

Since he grew up in this mostly-white town, Carson felt "totally exceptional" and "set apart." While he was singled out as black in Los Alamos, he didn't really know or understand black culture even though he certainly was fascinated by it.

(I) had this identity of being black but not being exposed to black culture...I had a fascination about the black community...I remember I went with my dad to Denver and I went to my grandad's funeral in Detroit. In both those incidents we stayed in black communities. I remember with fascination that I could walk outside and see all these black people...And I remember when our cousins came to visit, they were dancing differently and talking in a different way. There was something going on there that I felt I was missing.

Growing up in Los Alamos gave him a keen sense of what he gained and lost there. While he felt part of the unique community there (and all the more unique because his was one of three black families in town at the time), this membership also made him feel like he was separate from black community more widely in the United States.

As a part of the Los Alamos community, Carson also felt in the middle of some divergent dynamics about economic class. His father did not go to college, as he mentioned in relation to his school experience, and took a job in Los Alamos as a security guard. Even so, the family “had a spacious three-bedroom house—something we would not have been able to afford elsewhere. I could walk out my front door and be in a canyon or go climb a mountain.” The town afforded his family access to striking natural settings adjacent to their home and, through the government housing provision for the town, a big house. While interacting with other New Mexicans, Clayborne found living in Los Alamos an object of resentment. In New Mexico “there was a sense that we were privileged middle-class kids. When we would play other kids in sports, they would try hard to beat us [because of this]...I recall a sense of resentment [that they held against us for all we had]. I encountered more racism in sports than in other areas.”¹⁵¹ It seems that this racism cropped up both on the road playing other teams and at home as he recalls being told by coaches “I don’t care if you are nigger or you are white,” and “you colored boys all jump well.” About these kinds of comments and attitudes he comments that “it is almost worse when somebody doesn’t realize they’re prejudiced.” These ‘well-meaning’ coaches did a lot to make him feel set apart, even under the guise of trying to complement his abilities or emphasize togetherness.

If Clayborne felt one set of dynamics from growing up black in white Los Alamos, he felt also that other dynamics were at hand with respect to the ‘Spanish’ parts of the population of the town. While he was aware of being ‘set

¹⁵¹ Ellipses and brackets in original.

apart' in some respects by whites, he "think(s) the anti-black attitude was stronger among the Spanish...There was also a lot of anti-Spanish prejudice [from the whites]. That was more upfront." He found himself in a 'unique' position here too where he was both experiencing racism from 'Spanish' Los Alamosans and simultaneously in a position to perceive the anti-Spanish racism of the whites. Interesting indeed that he would go on to participate enthusiastically in the civil rights movement and then to be the director of the Martin Luther King, Jr., Papers Project.

The number of African Americans in Los Alamos has been persistent and small. Some living there in decades after Clayborne Carson reported similar experiences and impressions to those he had. One African American physicist who became a high level manager in the eighties and nineties also worked at other institutions in the Department of Energy and in university physics. Bill loved living in the town and "the surrounding forests and mountains which make for excellent hiking and camping. The community is close-knit and I know lots of smart and friendly people. Our family has liked the experience of growing up here." All the same, he reported feeling that his status and his position were always viewed in terms of his ethnicity, "since I felt like certain people, colleagues, thought that my promotions were the result of my race and not my science. That was something that sometimes affects my confidence. Even though I have done lots of good science and interesting experiments, and even though I have a lot of experience in different labs and locations." For him the tension between acceptance into the community there and being held as different

proved discouraging and angering at times. He was glad to have the opportunity to work elsewhere for periods of time, much as he liked some aspects of Los Alamos.

For Bill's kids even other aspects entered into the picture. Bill was married to a white woman and their kids passed as white in many contexts. Thus while their father negotiated his identity as black scientist at the Lab, they were not always so identified. Donna, one of his daughters thought this was strange and, like Carson, she became more sensitive about other forms of racism in the town. She described situations where "people didn't think of us as black. I mean, if they didn't know my dad, and even he was light-skinned, or if they didn't put two and two together, they would think that my sister and I were white. Then when they would meet my dad their expressions would change and they would fumble for words. It was kind of funny but it was also embarrassing." Being perceived as sometimes white and sometimes black, Donna negotiated things necessarily differently than her father. She described how this made her

really curious about race and racism. The way that I could be one minute one thing and the next minute another made me wonder what could account for that and what the difference between the two could be. I also became really cognizant of the way that Mexicans and Indians were treated in Los Alamos, the way that there was this assumption of white superiority. I guess if people at school took me for white, they were more willing to try to draw me into that feeling, even though it wasn't always like they were talking about it so outright. If they took me for black then they'd be more wary about that, but sometimes overcompensate trying to fix or to validate my position.

While several of the people we have heard from in the course of this section have talked about their perspective on Los Alamos based on their ethnic identification, Donna lives in a very ambiguous way in relation to this process and thus gained yet another vantage on it.

While there were none at the Manhattan Project and the years afterward, there are now a number of Asian American scientists and families in Los Alamos. Primarily having come in the last few decades, after the immigration law changes of 1965, these scientists now represent an indispensable part of the government's weapons laboratories, just as they do for science in the U.S. more broadly. While a number of them work at Los Alamos, none has been promoted to a management position like those Bill has held, although an Asian American was recently named to an important management position in nuclear weapons. During the seventies and eighties and nineties, there were several South Asian families living in Los Alamos, and several more East Asian families. While they did not contend with the same assumptions about their academic worth and ability as did Mexican Americans and American Indians (if anything they suffered the opposite pole, *extreme expectation* about their intelligence), they did feel like their ethnicity was marked in a way that set them apart as not part of the white culture of the town.¹⁵² We can recall Alberta's recollections that she was both

¹⁵² Vijay Prashad's *The Karma of Brown Folk*, Minneapolis, Minnesota, 2000, makes a critical analysis of the way that Asians, especially South Asians, through being cast as model minorities, are used to intensify racism against other non-whites like African Americans and Latinos. He says that the emphasis in the United States on Asian intelligence and work ethic serves to reinforce ideological notions of laziness and stupidity in blacks.

accepted into white Los Alamos, and was “whitewashed” even as she was also seen as Asian and different.

Many of these Asian American scientists are immigrants who are naturalized U.S. citizens for whom working for the government represents an induction into the most guarded sectors of American science. While this work and the clearance that come along with it clearly indicate that these Asian scientists are trusted by the state, it also places them in a position of vulnerability through their perceived ties to their home country or another foreign power. Thus many of these families find themselves negotiating the security and ethnicity dynamic of Los Alamos differently than others. Here we can recall the Chinese American families who were afraid to have any contact with the Lees during the time of their ordeal. Undoubtedly they felt that they were under suspicion and that contact with the Lees would seem to implicate them, too.

Immigrant Asian American scientists find themselves undergoing the ‘normal’ security scrutiny for Lab employees, plus a redoubled regime of questions and partial to total mistrust from co-workers and neighbors. While they usually report feeling part of the community of Los Alamos, they also describe extra efforts at impression management to shore up their image as good loyal Americans and workers on secret projects for the government. Wen Ho Lee worked on designs and computer codes for nuclear weapons in the heart of the weapons design group and with access to their secret data. At the time he thought that he had arrived in the sense that he was a naturalized citizen who liked his new country and who was working on challenging science where he was trusted with

important information. Yet, in retrospect, he thinks that he was always viewed with racism and with suspicion by some of his colleagues who never fully admitted him to their trust. While at the time “I wanted to think that I had successfully joined this group, just as all these other [non-Asian] guys did. Now I realize that I knew some people there who really knew me and who trusted me, and I knew others who would never go past my face and my accent and who never could trust me as ‘an American.’” Despite his avid appreciation of aspects of American culture like football and his enthusiasm about raising a family in the United States, not to mention his love of science and the scientific research that he did in America, Lee felt like he was not seen as unproblematically American enough to win acceptance to a core of trust and belonging even more tightly controlled than access to nuclear weapons secrets.

Asian American scientists in Los Alamos see themselves as challenging several entrenched assumptions at a time, which leads to specific hurdles and difficulties for their employment. As there were no Asian scientists at the Manhattan Project, the much-touted internationalism of that period and of the town since has some tension in accommodating Asians. The fact that Imperial Japan was an enemy in World War II, and that Japanese Americans were interned in concentration camps as a ‘security’ measure, means that clearly Japanese were not part of the work at the time. As China and Korea had suffered under Japanese colonization, and were still largely agricultural or simple manufacturing societies at the time without a significant technological base, very few Chinese or Korean immigrants had advanced scientific degrees. Even if they

had, the persistence of race in construing qualification and loyalty was significant.¹⁵³ It was one thing to speak of an 'international group of scientists' who were all white and came from Europe, and who all spoke English and shared certain cultural knowledge in common, it would have been quite another to speak of a more robustly international group of scientists including those whose English was more halting and who came from markedly different, non-Western cultural traditions. In a sense, it is accommodating exactly this more robustly international conception that has been the direction of slow movement since the war.

Within the context of an American society which has historically emphasized European immigration, even in the light of continual immigration from other areas of the globe and of a substantial indigenous population, Asian immigration is still a more difficult proposition in the respect that Asian immigrants are more likely to persistently be associated with their home cultures, or with drastic stereotypes about their race. While the social path for immigrating to the U.S. from France or from Italy or from Czechoslovakia (before the split) was well-worn and, importantly, well-accepted, immigrating from most places in Asia still entails more challenges to join mainstream U.S. culture. While immigrating from France, for instance, is pretty directly accepted and raises little suspicion about lingering loyalties to France, immigrating from China or Taiwan or India often leaves Asian Americans open to queries and suspicions as to their 'nationality,' as it is often erroneously called, and their loyalty. A German immigrant's trip to visit family in

¹⁵³ While there were African American, Mexican American, and American Indian workers at the Los Alamos Laboratory since 1943, the first African, Mexican, and Indian *scientists and engineers* working there would only come later.

Germany is more likely to be seen as a matter of course, while Wen Ho Lee's trips to Taiwan to visit family came to be construed as concrete indications of a divided loyalty justifying suspicion of him.¹⁵⁴ Others report confronting this same kind of difficulty. Steve, the son of a Chinese immigrant physicist in Los Alamos reported how his "dad always felt like he had to be at pains to indicate that he was really and truly an American. He always said that here a German accent could mark you as a good physicist while a Chinese accent could mark you as an outsider." Steve reported feeling himself between this ambiguous position of his parents and full belonging and participation in the youth society of Los Alamos. One of the top students in his class and excelling in a number of activities, he felt like he fit into things there, but was still seen as somewhat foreign based on his parents immigration status and based on perceptions of his ethnicity.

South Asians report the same kind of dual status, at once accepted and belonging but also marked as different from the white majority in town. While South Asians and East Asians are, according to U.S. cultural imagination, highly gifted in science and therefore they also 'belong' in Los Alamos, inasmuch as Los Alamos plays into this imagination, there are still cultural and nationalist barriers which they sometimes encounter. Tony, the son of a *Desi*¹⁵⁵ family in Los Alamos, describes how

I did well in school and I did sports and other activities, I was friends mostly with white kids, since that's who is in town. I felt

¹⁵⁴ My family's trips to visit relatives in Italy did nothing to stir up suspicion or security concerns about my parents and their security clearances, my own clearance came through at a time when I was living in Italy and working for an international organization.

¹⁵⁵ *Desi* is a colloquial term for members of the South Asian diaspora.

well-accepted and well-liked, but there was always the issue that I am Indian. Often enough I could just blend in and we'd be doing regular high school and teenage stuff, but sometimes it would come up. Since we were from India, there wasn't the sense that we could be communists or something as there was for Chinese families, but there was this misunderstanding and this mystery about India, and that was in the back, or sometimes the front, of people's minds.

Negotiating the issues of immigration, ethnicity, and nationhood, Tony expresses some of the same themes which come up for a number of Los Alamosans. On the one hand he partakes in the internationalist tradition of the town, on the other hand he represents a relatively new and developing aspect of this internationalism where non-European immigrants are coming more and more to play a part in it.

Other Chinese and Taiwanese immigrant scientists report similar conundrums. Chinese are forced continually to register their personal disapproval of and distance from the People's Republic of China in order to avoid suspicion of being loyal to that state.¹⁵⁶ One scientist, Erin, said that she felt she must be especially "proud and glad to be American-- which certainly I am thankful that I was able to move to this country and to make a career and a family here--but I have to be so glad that it is almost to the point of forgetting my Chinese culture. I want to be able to maintain that, and teach my kids Chinese." She described how it was a novel stress for her to be seen as only partway

¹⁵⁶ Lest we might think that this has started to wane as a factor motivating attitude and action, the Katrina Leung case currently unfolding shows how much this doubt can trail and assail one.

American. She felt as if that status prevented her from moving up further once she had come to work at the Laboratory.¹⁵⁷

Taiwanese scientists are pressured to define themselves against China in an American public that understands only very poorly the geopolitical situations and the histories of these two nations. On the one hand Taiwanese are celebrated as anti-Communist, liberal democratic allies to the U.S., on the other hand most Americans are hard-pressed to take notice of who is Taiwanese and who is mainland Chinese.¹⁵⁸ Thus it was that Wen Ho Lee was seen as purely and simply Chinese since that fit the perceptions and categories of both U.S. society more broadly and the security state more narrowly. Even though Chinese and Taiwanese often share language and cultural traditions, as well as ancestry, the political situation between their home countries leads to some animosity and distrust between their communities in the U.S. But, at the same time, as they are lumped together as an indistinguishable ethnic category by U.S. society in general, and they both have found themselves fighting for immigration status, employment, and political representation, there is a great deal of crossover and

¹⁵⁷ Eventually, in the aftermath of the Lee case, she left the Laboratory because she felt so suspect and ill at ease.

¹⁵⁸ Complicating the picture still further is the distinction between 'native' Taiwanese who long lived on the island, and the mainland Chinese who came there at the time of the Communist Revolution in 1949 when Chiang Kai Shek and his nationalist forces retreated to the island. The repression and secret policing by the Kuomintang government that these nationalists set up were so intense as to engender little trust and admiration from most Taiwanese. Several major slaughters, such as the "2-28 Incident" demonstrated the ruthlessness of the Kuomintang. As far as most Taiwanese were concerned, there was little difference between the autocratic regimes in the mainland and on the island, despite their avowed ideological difference. Wen Ho Lee credits the reign of terror of the Kuomintang to his lifelong avoidance and suspicion of politics—a stance that would later make him "more vulnerable to the accusations and lies of the U.S. government against me."

cooperation between these groups. The fault lines of these tensions and allegiances were illuminated at some points in the Lee case. Some mainland Chinese were initially reluctant to support a Taiwanese, just as some who ordinarily support due process were loath to support a nuclear weapons scientist.¹⁵⁹ Later, as the situation was construed more in terms of U.S. sociological dynamics and dangers, Chinese Americans and Asian Americans in general expressed significant support for Lee based on the realizations that his ordeal *could also be visited upon them*. Any number of middle class Chinese Americans who had formerly considered themselves neatly assimilated and trusted within science, industry, and government, came to fear that their status and belonging was not that far different from Wen Ho Lee's. One family from New Jersey, the Chens, told me that they

had spent so much time making our lives here and convincing ourselves that we were American. With our home and our jobs and our family we thought that we were no different from other white families on our block. When we thought about what was going on with Wen Ho Lee, we realized that his situation was pretty similar to ours—he was a U.S. citizen with a house and a family and a good, respected job who nonetheless found himself in jail. That hit close to home to think of that.

For many Chinese Americans, as for this family, it was not so much Lee's status as a weapons scientist or as Taiwanese that struck them, it was, rather, his doomed attempt to join the American middle class as an Asian that made them stand up and take notice.

¹⁵⁹ Despite their later and commendable stances, *The Nation* and *The Village Voice*, among others, initially refused to have anything to do with the Lee case and remained strangely silent about it, despite ample political prodding.

The response of the Chens, who became active on Lee's behalf, found a parallel on the part of not only many Chinese Americans, but many Asian Americans in general. Many of these people had initially ignored the Lee case or failed to note any parallels to their lives, only to feel as it dragged on that it was too close for comfort to their lives. One east coast Indian American family, the Chauduris, initially viewed the news about Lee not only as a sure indication that he was guilty, but also as the confirmation of their worst fears about China's irredentist ambitions in Asia.

When we heard about Lee we thought that he must be a spy. We didn't take note of whether he was Taiwanese or Chinese, we just thought that he was certainly helping China to develop better weapons. As things continued, we started to see that what was happening to him was more because he was an immigrant to the U.S. Although we didn't work in the defense sector like he did, we could see how, as science professionals and as immigrants, the same thing could happen to us.

The sentiment that 'this could happen to us' was reiterated to me again and again in response to the Lee Affair. Asian Americans in the government defense sector, but also in science more broadly, felt that the Lee case revealed their situations to be more tenuous than it had seemed before. As such, the mobilization and the efforts around Lee became a good example of pan-ethnic organizing, both among Asian Americans and more broadly. What started out as fears and worries among a small and informal grouping of Taiwanese scientists who were working for the Department of Energy became a widespread and galvanizing episode in which common cause was realized among Asian

immigrants more broadly. Interesting as well is the way that other scientists, regardless of their ethnicity, also felt implicated in the case and that they could be singled out for special scrutiny and repression just as Lee had been.

The pan-ethnic organizing and response on behalf of Lee was an indication that there were many, some of whom have been quoted above, who felt that structurally and professionally they were in the same boat as Lee. This helps to account for why the Affair produced such a polarizing effect on Asian American scientists within the Department of Energy. While some scientists and families, already discussed, felt that the charges and the accusations required that they drop all contact with the Lee family, others responded by supporting Lee and speaking out from a position of solidarity. Bucky Kashiwa, a Japanese American Los Alamos scientist became a vociferous Lee supporter since, although he is Japanese, he felt plenty of common cause with Lee's situation. Cecilia Chang, also Taiwanese, and the wife of a distinguished Department of Energy nuclear scientist¹⁶⁰, not only felt wronged by the terrible treatment of her old friend, she also quickly picked up on the troubling social-political implications of his treatment for Asian Americans. A tireless, if controversial, supporter of Lee, Cecilia Chang kept pressure up to spread the word about Lee's treatment and to advocate for his release. Once he was released, she shifted her efforts to supporting a presidential pardon for Lee. In the aftermath of September 11th, 2001, she has devoted her efforts to fighting immigration abuses and forced deportations by the U.S. government, as well as to advocating for people like

¹⁶⁰ On a visit to the Chang home in Albuquerque, before they moved to Fremont, California, I observed pictures of Dr. Chang with five different U.S. Presidents.

James Yee who have been drawn into the latest versions of racial profiling in the name of national security.

Cecilia Chang is noteworthy for the energy and scope of her efforts, but also for her story as a political activist. In Chinatown, San Francisco, during Chinese New Year in 2000 when Lee was still incarcerated and we were strategizing how to continue and expand the support for him, she explained to me how

I never had any interest in politics and activism before. I used to just run a computer store, raise my family, participate in some Chinese cultural events in Albuquerque and then when we moved here. When this started happening to Wen Ho, I was so angry, not to mention confused. I thought 'How can this person who I have known for so long, who has spent so many years devoted to scientific research for the government as a loyal citizen, be suddenly treated like a traitor and an enemy?' I was furious to see what they said about him and what they did to him. It was what affected me deep inside and stirred up this energy to be an activist. I think that most people get like this when they are kids, but here I am, a grown woman with grown kids, who had been a professional all her life, and now I want to organize rallies and march to the government buildings, I want to stand up for my friend Dr. Lee and for other victims of injustice, especially victims of racist treatment by the government.

Repeatedly, Chang has described to me how this event is the one that changed her sentiments and turned her life around. As another immigrant American who realized that 'this could happen to her,' Chang gained a new passion for speaking out and for activism.

Cecilia Chang's experience is not the only one like this. A number of activists or community leaders found their outlook and their planning changing in light of the Lee Affair. The Committee of 100, then under the leadership of Henry Tang,

recognized early on that Lee's treatment was important for the rights and treatment of Chinese Americans in general. While they pressured government actors for his release and media actors, like the *New York Times*, to change their tune, they initially shied away from street protests and that type of pressure. As the magnitude of the case and the potential implications became more clear, they realized the importance of this kind of pressure too and came to support it in an exception to their usual *modus operandi*. Even more noteworthy was the change in the outlook and action of some Organization of Chinese Americans chapters. As a national organization with a number of branches, OCA is subject to significant variation in political and social outlooks from chapter to chapter. OCA New York had often been more reserved and more oriented toward political interventions 'on paper' like letter writing, petitions, and contacts with elected officials. In the height of the Lee case, they came to embrace and call for more direct and confrontational tactics like protests in front of the Manhattan Federal Court building. The leader of OCA New York at this time, Leo Lee, became especially enthusiastic about more direct and visible efforts on behalf of Dr. Lee. He said that this wasn't just time for quiet action, "but to raise or voices and be visible in speaking out against the treatment of Wen Ho Lee."

Just as Dr. Lee describes his post-incarceration perspective as having opened up a more sober reflection on his career in defense science, so several Asian Americans in Los Alamos have expressed concerns about the tenuousness of their position there. Like Lee, many of them tried to eschew those concerns by reassuring themselves that they could cement their position

and remove themselves from suspicion by diligent scientific work. But, as such work doesn't change one's ethnicity or the security implications of one's research, this strategy can't ultimately spare one from suspicion and from harsh treatment. Coming into disfavor, or even being openly accused of espionage and disloyalty is a particularly strong blow to these scientists, many of whom believed that they had successfully and almost tracelessly assimilated through their participation in scientific institutions, in the first place, and the institutions of state power, in the second place. Many scientists working in this area describe the same path that Lee followed: deemphasizing politics and focusing on science. Lee "thought that by just doing my research and focusing on the mathematics, I was safe from any risk, and from any racism. I always tried to do good work, and not to rock the boat or make any complaints about being an immigrant or being Taiwanese." So much so did Lee attempt to assimilate and fit in this way that he "didn't even know that there was any such thing as any Asian civil rights organizations in the United States. I knew about cultural organizations to learn Chinese and to carry on cultural events, but I didn't know that there was anyone who helped out Asians in trouble with the law and the government until after I was arrested. I never thought before that I might need help like that." While Dr. Lee is still passionate about science and math, and devotes much of his time to them, his case and his treatment has ushered a new set of concerns and 'problems' into his life. Before, he was primarily interested in science and in a scientific approach to life and knowledge. Now he describes a realization that

science is not the only way of looking at things, and certainly not germane to studying a number of social problems.

Like many scientists in Los Alamos, Wen Ho Lee had been accustomed to viewing science and the scientific method as a general frame of reference toward all sorts of issues and topics. As the story goes, breaking down a problem into its component parts and then 'solving' them in terms of their relations to fundamental laws is a method which finds successful application in all spheres of human existence. Mason, in her *Children of Los Alamos*, notes how "at Los Alamos, Oppenheimer's colleagues had revered his leadership abilities in unifying the scientists and his capacities to grasp the specifics of the various scientific problems and suggest workable solutions."¹⁶¹ Perhaps one of the most personal and most poignant changes of heart that Lee experienced as a result of his ordeal is the realization that this does not always hold true. For instance, based on his new vantage point post-incarceration, Lee "realize(s) that racism is not a scientific problem. We can't solve it by a scientific approach. It is a cultural problem. The only way to change it is for people to exert effort on it over time, and for them to form friendships and relationships across communities and races so that they understand and respect one another. It can't change overnight, it is going to take a long time, and we can't just make a proof like we could for a math problem. This is a different type of problem."

¹⁶¹ Mason, p. 140.

Chapter 8

Concluding Unscientific Postscript--Government by Crisis:

One important aspect of the Wen Ho Lee Affair is the way that it demonstrates a model of government by crisis in which matters of policy are set by decisive crises rather than fundamental discussion and democratic process. While of course this phenomenon has myriad parallels at all levels of government—certainly, for instance, much of U.S. presidential politics centers around the crisis and the scandal, and the general level of corruption and scandal in politics is such that it has almost become banal or uninteresting to talk about it—there are decisive ways in which crisis guides action and sets policy in the world of security and defense. Since the National Security State in general exists in a state of tension—an arms race, if you will—with democratic state structures due to its secrecy and its dark matters of business, there are already a number of structural social factors shielding the policy and the work of security from public scrutiny and debate. Even a cursory consideration reveals how the historical and environmental dimensions of nuclear science and nuclear weapons are generally deemphasized and ignored, even in light of their glaring urgency and continued aftereffects. With regard to the nuclear state and the nuclear economy in the United States, both the memory of Hiroshima and Nagasaki and the extended co-presence of humans and other animals and plants—and mountains and mesas—with uranium and plutonium and tritium and the like are routinely suppressed out of a kind of *need*. The discussions and speculations about contamination and about brain tumors, leukemia, or other cancers in Los Alamos

are charged not just, as it would often seem, because they involve people's work, more so these crises are charged because they involve people's selves and their very being. The concern about Manhattan Loop or Acid Canyon for, example, shows an awareness and a fear that there are many feedbacks to the work which has been pursued here and that they affect the ongoing life here.

If Los Alamosans are eager to scientifically scrutinize the evidence and the epidemiology, and often to chock things up to 'background radiation' or 'the natural effect of living at a higher altitude,' nonetheless there is a mortal fear at the very heart of the concern about these reports inasmuch as they bear on the health and safety of all who live there. By all means I can identify with this sentiment. While of course it is uncanny to find out that there is so much plutonium stored and worked and shaped in town, and that there has been tritium in the water, on top of these older public knowledges of the town, I was shocked to find out several years ago that I had grown up nearly my entire childhood just a mile and a half or so from the nuclear waste dump of the Laboratory. While this became public knowledge in the light of increased concern about environmental and health concerns at the Lab, it has been there since the forties, and had been a secret site. While many clearance-holding employees of the Lab knew about the site down near White Rock, they were constrained from talking about it by the classification and security measures to which they were subject. I know that my family, and those of my cousins and friends, did not know about this facility which we went to school and hiked around so near to. It is of course likely that our fathers and mothers, and other parents in the town, knew about the

waste dump but didn't tell their families, although they themselves may have harbored concerns and worries. This is a perfect example of the way that competing loyalties between the state and the family, between 'security' and personal safety, serve to influence Los Alamos society.

The response to possible contamination from the history of the work at Los Alamos thus has at least two axes, scientific and existential, and each of these has a number of subcomponents. On the one hand the scientific response questions the validity of the evidence of contamination and illness in relation to supposedly 'normal' or 'acceptable' levels, often employing a strategic or desperate relativism—in the form of the often repeated claim that *one couldn't prove scientifically that this leukemia or that brain tumor was caused by radioactive contamination*. This is a strange time indeed for scientists to adopt David Hume's position after so much experimentation and work founded on causation and effect. The scientific response also often emphasizes the element of *control*: that as we understand these materials and processes so well, we are able to produce them and work with them and store them without unintended contamination. As this line goes, we have to understand the emissions and the material properties of radioactive materials in order to use them in weapons and in reactors. As we understand them so well, we are able to treat them in a predictable and controlled fashion. One plutonium chemist complained about:

All the environmentalists and New Agers from Santa Fe who *don't understand the science* and who make such a big stink about what we do up here. I share the same goal that they do, to control this stuff and keep it out of the environment. But it seems to me that if

you are going to do that, you have to *understand* it and how it works, you can't just go on emotion and impressions. A lot of them are well-meaning but they don't know the science so they can only participate in the debate to a certain level.

Also, at times, there is a valorization of scientific enterprise and discovery which ranks them above health and survival of some communities (we need only think of medical and experimental use of animals to see this quite clearly). As a last and more desperate element of the scientific response, one graduate student scientist who grew up in the town reasoned that "this is a scientific town and the people who work with plutonium and other radioactive materials are scientists. They are rational people and they live here. Why would they intentionally expose themselves and their families to danger?" Why indeed, and yet people do move and stay here with their families, where, at the least, it is known that deadly materials reside and come and go with trucks like groceries.

Anyone who has been around the town and the Lab for long will know first-hand or through gossip of projects and experiments which saw the natural setting, the forests and mesas and cañons, of Los Alamos, as an open and contaminable landscape for the research. Routine release of chemical and of radioactive materials, even if in small amounts, into the environment are reported by workers across the Laboratory. One Lab environmental worker told me about an assay procedure which entailed "filling a large cask with some nasty chemicals and trace amounts of plutonium. First of all, some of this might spill or leak. Then, to make matters worse, after the experiment, the protocol was just to open the things and dump it out right there in the field, to collect there and to flow

down the valley.” Shocking as this procedure might seem, closer acquaintance with the business there make it seem all the more shocking by how frequently this kind of thing has gone on. Explosives and sub-critical testing at many different areas of the Laboratory have left them with uncharted and uncollected residue such as undetonated explosives to radioactive and chemical agents.

One ‘Old Timer’ told me how:

We used to do all kinds of explosives testing. The premium was on developing the devices, so we took certain areas of the forest, or certain valleys, and we would do thousands of different tests there. We wanted to understand the properties of the explosives, how they acted and the force of their explosions. We had to know these things to design the explosive lenses. As time went on we wanted to develop and use better explosives, ones that were longer lasting and more stable. Also, there were pushes to think up and develop different kinds of weapons, not just your regular atomic bomb or hydrogen bomb, but other weapons for other applications.

During the atmosphere of deadly competition fostered during the Cold War, much emphasis was placed on superior firepower and on developing new types of weapons systems first: to wield them over the enemy, and to develop ‘defensive’ countermeasures against them. As an outgrowth of this impetus, one materials scientist told me the story about “some guys who realized that, around the country, we had a lot of depleted uranium on hand, and as good materials scientists these guys got to thinking about how it was so incredibly dense, and how could we use *that* as a weapon. So we used that and tested it out too.” This is an interesting aspect of ‘the science’ at Los Alamos. As much as it involves and crosses over with so-called fundamental research and basic science, much

of the science emphasized there has been weapons science, so that when people speak of 'pushing forward their research' and 'continuing their science,' it means advancing the frame and the technique of weapons science. It is for this reason that Los Alamos represents such a puzzling conundrum in the history of science—it represents the marshalling of all of the nobility, the high-mindedness, and the inquisitiveness of the scientific tradition for the purpose of killing. While there is of course the counterclaim that working on these weapons is the only way to prevent their use, this also does not answer the nagging questions about 'how can one work on these weapons everyday, for a career?' and 'does not their existence, and in such numbers, pose the greatest threat by itself?'

As for the existential side of the response to the historical and environmental dimensions of the work there, this is usually much more hidden despite, or in proportion to, its urgency. To begin with, some of the scientific responses are also existential ones. Has not the belief in regularity, prediction, and control of nature often been used as an implement to weigh against chaos in an attempt to circumscribe it and master it? The world is, in a sense, more domesticated for us if it should obey laws and a fundamental order. What should we do if we much rather believed that it operated by fundamental chaos? So, in the face of deadly possible consequences, one can well understand the appeal of prediction and control. And, there is an ethical-existential dimension inasmuch as the flip side of the question 'why would these rational scientists expose themselves and their families?' is 'how can they do it?' In this respect, the concerns about contamination and safety are of course not just about safe levels and absorbed

doses, they are about survival and uncertainty, or about certainties that are horrible to face. Part of the reason that the nuclear age is so very vexing is its inhuman scale. These weapons and energies dwarf the size and intensity of the individual human body, and the time scales of nuclear processes and half-lives are either too quick for human perception and escape or long enough to alter the environment for thousands of generations of human life.

Given that the risks and the already-achieved disasters of the nuclear age have been so great, it is certainly germane to ask what could motivate this turn in human affairs. While technical curiosity and the advancement of science have been to some degree involved as motivators, the crucial element seems to have been the atmosphere of *crisis*. The Cold War was a prolonged and produced crisis which provided motivations for rapid development and an excuse for expediency. While of course industrial development has resulted in a mass despoliation of the planetary ecosystems even without nuclear technology, it is doubtful that so many areas in the U.S. would have been set aside for such high-risk technical activity if the sense of crisis hadn't added the impetus and the emergency. Contrary to sometimes-circulated popular accounts, much was, in fact, known about radiation and its harmful effects before nuclear testing went into its full and crazy swing. Without a sense and a state of emergency, would so much intentional exposure of U.S. military personnel and civilians, not to mention Marshallese islanders and people from all over the world, have been allowed? Would the years of research at Los Alamos have been carried out the same way, or at all, without the sense of ongoing crisis?

While the Cold War was an ongoing crisis, upon closer inspection it was, of course, an ongoing string of crises which maintained a state of emergency and animosity. Clearly, World War II represented a civilizational crisis in which the forces of imperialism and industry coalesced into brutal societies of conquest which threatened decent life in the world. Yet, we might say that Hiroshima and Nagasaki were global crises in that they clearly indicated a change to the future of warfare and state power. The Soviet atomic bomb explosion in 1949 was treated as a major crisis in the U.S. which pushed the development of the H-bomb which also in turn became a crisis for the Soviets who developed their own H-bomb. Things continued with anti-Communism and McCarthyism and Alger Hiss and then the Cuban Missile Crisis and on down the line with bigger weapons, smaller weapons, different delivery systems, and an ongoing succession of technical and political crises. In the state of emergency fostered by these crises, the question has often been 'what must we do?' rather than 'what should we do?' Add in the factors of nationalism and national security which are the constant companions of these crises, and the mutual mistrust and ongoing pursuit of strategic superiority in statecraft seem like a perpetual motion machine.

With so many good examples from the Cold War era in which crisis and exigency seemed to drive response rather than deliberation, it is certainly germane to ask whether things have changed in this respect. Of course, to ask this within the context of America in the Bush Jr. generation might seem such an obvious question as to be laughable. Yet, I believe that based on the study of

the Wen Ho Lee Affair and related incidents, it is clear that not only this kind of rule-by-crisis still exists, but also that it has crucial consequences for both international affairs and U.S. domestic life. The Lee case both played on a longstanding crisis with China in American politics and in Euro-American history (such a live and brutal one that Lee as Taiwanese could be presented as Chinese) and it fostered a huge crisis concerning perceived Chinese threat to U.S. national security. While incidents of crisis with China have also periodized the Cold War, such as the Korean War, Chinese nuclear proliferation, the Vietnam War, disputes over Taiwan and the South China Sea, it is also true that China as a culture and as a people has represented an object of veneration, as well as of mystery and fear, for hundreds of years in European history even before colonialism and the voyages to the New World, which were of course tentatives to get to *the east*.

If other crisis of the earlier Cold War resulted in the crash program to develop this or that weapon, what has the crisis of the Lee case resulted in? On the one hand, the Lee crisis seems to have been a 'classic' Cold War ploy to portray a strategic enemy as having made a decisive technical advancement. As China's nuclear technology was previously said to be so primitive compared to U.S. weapons, this leap would, if true, have made China almost into a nuclear peer. Faced which such a threat, it was thought, there will be no choice but strategic military competition with them, rather than trade-based relations or cultural interchange or some other basis. Even without the Soviet Union, if China were suddenly seen to be eroding the U.S. nuclear advantage, it would be 'balance-of-

terror' all over again. As it turned out, the Lee case didn't succeed outright in catalyzing a major new arms race which would have meant ongoing work for Department of Energy weaponeers and Chinese colleagues. However, there are those, such as Senator Richard Shelby, who hold to the line that the PRC did in fact receive all of our precious nuclear 'crown jewels,' and that it will only be a matter of time until they incorporate them into their own weapons. While the facts and assumptions of the Lee case seemed to fall away to nothing, the paranoia of Chinese espionage survived unabated and continued to be a motivating factor in agencies across the security state. Of course now this strategic situation has been subject to some revision in light of post-September 11th 'War on Terrorism' alliances. As both the U.S. and China saw some strategic interests in opposing Islamic states and policing internal Islamic populations, both were happy to be able to support one another's efforts 'against terrorism.' However, it is unlikely that the strategic realists, and Cold Warriors, of the Bush administration have altered their militarily competitive stance toward the People's Republic of China. Of course, in the first days of the administration, Bush explicitly declared a policy of strategic military competition, rather than trade partnership, with China. Then, the incident of the forced-down U.S. Navy P-3 Orion spy plane strained ties further between the U.S. and China.

While the Lee Affair only partly produced a clear-cut military project or agenda against China, it did serve to legitimize extraordinary policing and discipline measures against suspect ethnic minorities in the United States. While Lee's treatment finds a number of historical antecedents, it is also similar to measures

taken against terrorism detainees. Remarkably, the Department of Justice Investigator General's report on conditions for the detainees in New Jersey and Brooklyn cites many of the same techniques used on Lee: solitary confinement, 24-hour illumination of cell, extremes of heat and cold, continual observation and verbal harassment, and shackling of the ankles and wrists for all movement. While at the end of the Lee case racial profiling was starting to be seen and presented as an offensive practice antithetical to democracy, the situation after September 11th has offered any number of passionate defenses of racial profiling as a necessary and just technique. In retrospect, many now feel that Lee's treatment wasn't so bad or outrageous. And, of course, the tenor of the majority of references to the case present him as guilty.

But the Lee Affair also fit into another sense of crisis generated over several years about the security and management of Los Alamos. Part of the paranoia generated in the case was that Los Alamos represented a shoddily-run open book for any would-be spies. If such an egregious spy as Wen Ho Lee, as he was originally described, could live and work for decades at the Laboratory, it must be a problem. During the initial set of reactions to the bogus news about Lee, a major reorganization of the Department of Energy was announced. The Department of Energy and its precursors the Atomic Energy Commission and the Energy Research and Development Agency had been established as explicitly *civilian* agencies with responsibility for design and production of nuclear weapons in order to guarantee that only a part of nuclear knowledge and control would reside in the military. As the military would be entrusted with the deployment and

use of nuclear weapons, Congress was loathe also to entrust all research and manufacture and production and movement of them to the military. Hence the thinking behind the institutional setup of these agencies was a checks-and-balances system over nuclear weapons power. In the response to the China crisis which the Lee Affair supposedly represented, all nuclear weapons research and development was grouped under a new component of the Department of Energy called the National Nuclear Security Council. Clearly, the name of this organization is much more security and military oriented, and indeed that is its character. It is headed by a retired Air Force General who still has abundant ties and concerns within the military services. Similarly, the staff of the NNSC is more heavily military than that of the DOE previously.

When Lee was found out not to be a spy and that breach turned out to be fictional, the sense of malaise about Los Alamos did not dissipate, rather it built up in other events like the loss of computer hard drives containing nuclear weapons information, then their eventual discovery behind a copying machine. In the last year and a half, a new round of security and management scandals have rocked Los Alamos and have contributed, or been spun to emphasize, the sense of a crisis of security at the Lab. The ultimate goal of this new round of security crises has been to question then dislodge the University of California's management of Los Alamos, and possibly of Lawrence Livermore National Laboratory as well. Such a huge government contract, with the associated resources and prestige, is obviously attractive to those who wish to have a bigger piece of the defense budget pie. Hence it has been that this administration has

from the beginning pursued a strategy to shake things up at Los Alamos and bring about change in their favor. This strategy has effectively taken up the security crises already fomented during Clinton and has linked them to new ones in order to try to present the University of California as lax and irresponsible. As I was writing this study, my father was caught up in this latest crisis, stripped of security clearances, and fired. Two security specialists sent by the administration to LANL played key roles in generating this latest crisis and tipping the balance against the University of California. A close friend of mine from growing up, whose stepfather hired me at the Laboratory years ago, was coerced into acting as FBI informant in the case, and the mother of another friend of mine since elementary school was the one who signed and sent the papers terminating my father's security clearances with prejudice. Like the Wen Ho Lee case this was another crisis which positioned an individual's career and loyalty against the expediency of certain actors within the state structure who would rather push for a desired outcome by crisis rather than by open debate and deliberation. And, in the same way as the Lee case, this latest crisis laid bare the awkward tension between personal, affective, friendship ties and the loyalty to the state formalized in security clearances which is such a strong component of Los Alamos life.

While the ethnographic evidence still suggests that this community is an example of extraordinary securitization of everyday life, nonetheless a picture was painted of the Laboratory as shockingly permeable in its security borders. In back of much of this hand-wringing about Los Alamos seems to be the memory

that it could, in fact, be a military establishment as it was during the Manhattan Project and shortly after. As military measures are seen to be an appropriate response to crises of security, it is perhaps not surprising that the further militarization of Los Alamos, in the securitization of the town itself, would be seen as a desirable development. While the place does have an amazing amount of security measures and mutual observation of residents in place, it does not have, as a military base would, a perimeter fence and military guards. Los Alamos, of course, once did, and there must be those who think that the experiment of civilianizing, then privatizing the security functions of the nuclear establishment has made it weak and vulnerable. Among the effects of this security crisis has been the ending of the University of California contract to run Los Alamos National Laboratory, which it has held since 1943. Although California can still bid for it in a 'free market' fashion, the contract will now be set to a supposedly open bidding process. But, gossip and news reports in Los Alamos, not to mention in Washington and in Austin, have it that the University of Texas is a likely institution to assume management of Los Alamos. Taken together, the major crises of the last decade in and around Los Alamos are a means of pushing toward a re-militarized (or more militarized) Los Alamos where the University of California is no longer manager and benefactor.

Bibliography

Alperovitz, Gar, *The Decision to Use the Atomic Bomb and the Architecture of an American Myth*, New York, Knopf, 1995.

Alperovitz, Gar, *Atomic Diplomacy: Hiroshima and Potsdam—the Use of the Atomic Bomb and the American Confrontation with Soviet Power*, New York, Simon and Schuster, 1965.

Armstrong, Ruth W., *New Mexico, from Arrowhead to Atom*, South Brunswick, A.S. Barnes, 1976.

Aronowitz, Stanley, *The Death and Rebirth of American Radicalism*, New York, Routledge, 1996.

Aronowitz, Stanley, *From the Ashes of the Old: American Labor and America's Future*, Boston, Houghton Mifflin, 1998.

Aronowiz, Stanley, *How Class Works: Power and Social Movement*, New Haven, Yale University Press, 2003.

Aronowitz, Stanley, *The Knowledge Factory: Dismantling the Corporate University and Creating True Higher Learning*, Boston, Beacon, 2000.

Aronowitz, Stanley, *Science as Power*, Minneapolis, University of Minnesota Press, 1988.

Babich, Babette, *Nietzsche's Philosophy of Science: Reflecting Science on the Ground of Art and Life*, Albany, SUNY Press, 1994.

Bandelier, Adolph Francis Alphonse, *A history of the Southwest; a study of the civilization and conversion of the Indians in Southwestern United States and Northwestern Mexico from the earliest times to 1700*, ed. by Ernest J. Burrus, Rome, Jesuit Historical Institute; St. Louis. St. Louis University, 1969.

Bandelier, Adolf, ed., *The journey of Alvar Nuñez Cabeza de Vaca and his companions from Florida to the Pacific, 1528-1536*; translated from his own narrative by Fanny Bandelier, together with the report of Father Marcos of Nizza and a letter from the Viceroy Mendoza, New York, A.S. Barnes & Company, 1905.

Blume, Judy, *Tiger Eyes*, New York, Laure Leaf, 1982.

Bonfadino, B, *Relacion del descrvbimiento [sic] del Nvovo Mexico: y de otras muchas prouincias, y ciudades halladas de nueuo; venida de las Indias, à España, y de alli mandada à Roma a lo. de Montoya*, En Roma, 1602.

Boyer, Paul, *By the Bomb's Early Light: American Thought and Culture at the Dawn of the Atomic Age*, New York, Pantheon, 1985.

Bredin, Jean-Denis, *l'Affaire*, Paris, Julliard, 1983

Buchanan, Patrick J. *The Death of the West: How Dying Populations and Immigrant Invasions Imperil Our Country and Civilization*, New York, Dunne, 2002.

Caldicott, Helen, *Missile Envy: the Arms Race and Nuclear War*, New York, Morrow, 1984.

Caldicott, Helen, *The New Nuclear Danger: George W. Bush's Military-Industrial Complex*, New York, New Press, 2002.

Caldicott, Helen, with the assistance of Nancy Herrington and Nahum Stiskin, *Nuclear Madness: What You Can Do*, Milton, Queensland, Jacaranda Press, 1978.

Churchill, Ward, *A Little Matter of Genocide: Holocaust and Denial in the Americas 1492 to the Present*, San Francisco, City Lights Books, 1997.

Ward Churchill, *Struggle for the Land : Indigenous Resistance to Genocide, Ecocide, and Expropriation in Contemporary North America*, San Francisco, City Lights, 2002 [originally Monroe, Me., Common Courage Press, 1993].

Churchill, Ward, and Jim Vander Wall, *The COINTERLPRO Papers: Documents from the FBI's Secret Wars Against Domestic Dissent*, Boston, South End Press, 1990.

de Espejo, Antonio, *Histoire Des Terres Nouvellement Descouvertes, Avsquelles a esté ja trouué quinze belles Prouinces remplies de villes & villages: ausquelles Prouinces il se trouue grandes commoditez, & abondance de diuerses especes metalliques: lesquelles terres ont esté descouuertes par Antonio de Espejo & nommees le nouveau Mexico*. Traduit de l'Espagnol en langue françoise, par M. Basanier, À Paris, Chez la vefue Nicolas Roffet, 1586.

Defense Atomic Support Agency, *The Effects of Nuclear Weapons*, ed. Samuel Glasstone, Washington, Atomic Energy Commission, 1957.

Del Tredici, Robert, *At Work in the Fields of the Bomb*, New York, Harper and Row, 1987.

DuBois, W.E.B., *The Souls of Black Folk*, Norton Critical Edition, ed. Henry Louis Gates, jr., New York, Norton, 1999.

Fermi, Rachel, and Esther Samra, *Picturing the Bomb: Photographs from the Secret World of the Manhattan Project*, New York, H.N. Abrams, 1995.

Feynman, Richard P., *"Surely You're Joking, Mr. Feynman": Adventures of a Curious Character*, as told to Ralph Leighton, edited by Edward Hutchings, New York, W.W. Norton, 1985.

Feynman, Richard P., *What do You Care What Other People Think: Further Adventures of a Curious Character*, as told to Ralph Leighton, New York, Norton, 1988.

Folsom, Franklin, *Red Power on the Rio Grande: the Pueblo Revolt of 1680*, Albuquerque, University of New Mexico Press, 1996

Foucault, Michel, *Histoire de la folie à l'âge classique: Folie et déraison*, Paris, Plon, 1961.

Foucault, Michel, *Les mots et les choses: une archéologie des sciences humaines*, Paris, Gallimard, 1966.

Foucault, Michel, *Politics, Philosophy, Culture: Interviews and Other Writings 1977-1984*, New York, Routledge, 1988.

Foucault, Michel, *Surveiller et punir: naissance de la prison*, Paris, Gallimard, 1975.

Franco, Richard, and Douglas W. Richmond, ed., *Dueling Eagles: Reinterpreting the U.S.-Mexican War*, Fort Worth, Texas Christian University Press, 2000.

Glendinning, Chellis, *Off the Map: An Expedition Deep into Imperialism, the Global Economy, and Other Earthly Whereabouts*, Boston, Shambhala, 1999.

Glendinning, Chellis, *When Technology Wounds: the Human Consequences of Progress*, New York, Morrow, 1990.

Glenn, Evelyn Nakano, *Issei, Nisei, War Bride*, Philadelphia, Temple University Press, 1986.

Grinde, Donald A., and Bruce E. Johansen, *Ecocide of Native America: Environmental Destruction of Indian Lands and Peoples*, Santa Fe, Clear Light, 1995.

Groueff, Stéphane, *Manhattan Project: The Untold Story of the Making of the Atomic Bomb*, Boston, Little Brown, 1967.

Grousset, Paschal, *L'affaire Dreyfus et ses ressorts secrets: précis historique*, Paris, Société d'éditions illustrées, 1898-99.

Groves, Leslie R., *Now It Can Be Told: the Story of the Manhattan Project*, New York, Da Capo, 1983, [originally New York, Harper, 1962]

Knaut, Andrew L., *The Pueblo Revolt of 1680: conquest and resistance in seventeenth-century New Mexico*, Norman, University of Oklahoma Press, 1995.

Kornblum, William, *Blue Collar Community*, Chicago, University of Chicago Press, 1974.

Haraway, Donna, *Modest_Witness@Second Millenium: Female Man Meets OncoMouse*, New York, Routledge, 1997.

Heidegger, Martin, *Being and Time*, translated by Joan Stambaugh, Albany, SUNY Press, 1996.

Heidegger, Martin, *Poetry, Language, Thought*, translated by Albert Hofstadter, New York, Harper and Row, 1971.

Heidegger, Martin, *The Question Concerning Technology*, translated and introduced by William Lovitt, New York, Harper and Row, 1977.

Hersey, John, *Hiroshima*, New York, A.A. Knopf, 1976 [originally 1946].

Hoddeson, Lillian, and Gordon Baym, *Critical Assembly: a Technical History of Los Alamos During the Oppenheimer Years 1943-1945*, Cambridge, Cambridge University Press, 1993.

Howes, Ruth L., and Caroline L. Herzenberg, *Their Day in the Sun: Women of the Manhattan Project*, Philadelphia, Temple University Press, 1999.

Johnson, Douglas, *France and the Dreyfus Affair*, London, Blandford, 1966

Kahn, Charles. H., *The Art and Thought of Heraclitus: an Edition of the Fragments with Translation and Commentary*, Cambridge, Cambridge University Press, 1979.

Kanon, Joseph, *Los Alamos: a Novel*, New York, Broadway Books, 1997.

Keller, Evelyn Fox, *Secrets of Life, Secrets of Death: Essays on Language, Gender, and Science*, New York, Routledge, 1992.

Kirk, G.S., J.E. Raven, and M. Schofield, *The Presocratic Philosophers, a Critical History with a Selection of Texts*, Cambridge, Cambridge University Press, 1983.

Toyosaburo Korematsu v. United States, 323 US 214 (1944)

Kuletz, Valerie, *The Tainted Desert: Environmental and Social Ruin in the American West*, New York, Routledge, 1998.

Lanouette, William, and Bela Szilard, *Genius in the Shadows: a Biography of Leo Szilard, the Man Behind the Bomb*, Chicago, University of Chicago Press, 1994.

Lansing, Lamont, *Day of Trinity*, New York, Atheneum, 1965.

Latour, Bruno, and Steve Woolgar, *Laboratory Life: the Construction of Scientific Facts*, Princeton, Princeton University Press, 1986.

Lee, Wen Ho, and Helen Zia, *My Country Versus Me: the First-hand Account by the Los Alamos Scientist Who Was Falsely Accused of Being a Spy*, New York, Hyperion, 2001.

Lens, Sidney, *Permanent War: the Militarization of America*, New York, Schocken, 1987.

Leymarie, Michel, ed., *La Postérité de l'Affaire Dreyfus*, Villeneuve d'Ascq, Presses Universitaires du Septentrion, 1998.

Lifton, Robert Jay, *Death in Life: the Survivors of Hiroshima*, New York, Random House, 1968.

Lifton, Robert Jay, *The Future of Immortality and Other Essays for a Nuclear Age*, New York, Basic Books, 1987.

Lifton, Robert Jay, *Superpower Syndrome: America's Apocalyptic Confrontation with the World*, New York, Thunder's Mouth Press, Nations Books, 2003.

Lifton, Robert Jay, and Richard Falk, *Indefensible Weapons: the Political and Psychological Case Against Nuclearism*, New York, Basic Books, 1982.

Lifton, Robert Jay, and Eric Markusen, *The Genocidal Mentality: Nazi Holocaust and Nuclear Threat*, New York, Basic Books, 1990.

Lifton, Robert Jay, and Greg Mitchell, *Hiroshima in America: Fifty Years of Denial*, New York, Putnam's Sons, 1995.

Los Alamos National Laboratory, *Los Alamos: the Beginning of an Era 1943-1945*, Los Alamos, Los Alamos Historical Society (reprint of earlier Laboratory publication), 1986.

Los Alamos Scientific Laboratory, *The Effects of Atomic Weapons*, New York, McGraw-Hill, 1950.

Lowe, Lisa, *Critical Terrains: French and British Orientalisms*, Ithaca, Cornell University Press, 1991.

Lowe, Lisa, *Immigrant Acts: On Asian American Cultural Politics*, Durham, Duke University Press, 1996.

Loyola, Sister Mary, *The American Occupation of New Mexico 1821-1852*, Albuquerque, University of New Mexico Press, 1939.

Martinez, Orlando, *The Great Landgrab: the Mexican-American War 1846-1848*, London, Quartet, 1975.

Marcuse, Herbert, *One Dimensional Man: Studies in the Ideology of Advanced Industrial Society*, Boston, Beacon, 1964.

Marcuse, Herbert, *Technology, War, and Fascism*, New York, Routledge, 1998.

Marx, Karl, and Friedrich Engels, *On Colonialism*, Moscow, Foreign Languages Publishing House.

Mason, Katrina R., *Children of Los Alamos: an Oral History of the Town Where the Atomic Age Began*, New York, Twayne, 1995.

The Mercurio volante of Don Carlos de Sigüenza y Góngora; an account of the first expedition of Don Diego de Vargas into New Mexico in 1692; translated, with introduction and notes, by Irving Albert Leonard, Los Angeles, The Quivira Society, 1932.

Mirbeau, Octave, *l'Affaire Dreyfus*, Paris, Séguier, 1991.

Mukherjea, Ananya, "Stopping AIDS at the Border: the epidemiology of infectious disease outbreaks," in *Radical Society*, Volume 30, no 2, July 2003.

New Mexico. Otherwise, the voiage of Anthony of Espejo, who in the yeare 1583. with his company, discovered a lande of 15. prouinces, replenished with townes and villages, with houses of 4. or 5. stories height, it lieth northward, and some suppose that the same way men may by places inhabited go to the lande Tearmed De Labrador. Translated out of the Spanish copie printed first at

Madreel, 1586. and afterward at Paris, in the same yeare. Imprinted at London for Thomas Cadman. [1587], Lancaster, Pa., Lancaster press, inc., 1928.

Nietzsche, Friedrich, *The Birth of Tragedy out of the Spirit of Music*, translated by Walter Kaufmann, New York, Vintage, 1967.

Nietzsche, Friedrich, *The Gay Science*, translated by Walter Kaufmann, New York, Vintage, 1974.

Oppenheimer, J. Robert, *Atom and Void: Essays on Science and Community*, Princeton, Princeton University Press, 1989.

Oppenheimer, J. Robert, *Knowledge and the Structure of Culture*, Poughkeepsie, Vassar College Press, 1958.

Oppenheimer, J. Robert, *Robert Oppenheimer: Letters and Recollections*, ed. Alice Kimball Smith and Charles Weiner, Cambridge, Harvard University Press, 1980.

Pettitt, Roland, A., *Los Alamos Before the Dawn*, Los Alamos, Pajarito, 1972.

Prashad, Vijay, *The Karma of Brown Folk*, Minneapolis, University of Minnesota Press, 2000.

Preucel, Robert W., ed., *Archaeologies of the Pueblo Revolt : identity, meaning, and renewal in the Pueblo world*, Albuquerque, University of New Mexico Press, 2002

Prince, L. Bradford, *A Concise History of New Mexico*, Cedar Rapids, The Torch Press, 1912.

Prucha, Francis Paul, *Documents of United States Indian Policy*, 2nd Edition, Expanded, Lincoln, University of Nebraska Press, 1990.

Radosh, Ronald, and Joyce Milton, *The Rosenberg File*, New Haven, Yale University Press, 1997.

Rankin, Adam, "Workforce at New Mexico's Los Alamos Laboratory to Grow in Restructuring Effort," *Albuquerque Journal*, NM Knight Ridder/Tribune Business News, March 17, 2004.

Reeve, Frank D., *A History of New Mexico*, New York, Lewis Historical Publishing, 1961.

Rhodes, Richard, *Dark Sun: the Making of the Hydrogen Bomb*, New York, Simon and Schuster, 1995.

- Rhodes, Richard, *The Making of the Atomic Bomb*, New York, Simon and Schuster, 1986.
- Rosen, Terry, *The Atomic City: a Firsthand Account by a Son of Los Alamos*, Austin, Sunbelt Eakin, 2002.
- Rotblat, Joseph, *Scientists' Responsibility in the Atomic Age*, London, Lindsey, 1964.
- Rothman, Barbara Katz, *Genetic Maps and Human Imaginations: the Limits of Science in Understanding Who We Are*, New York, W.W. Norton, 1998, [also reprinted as *The Book of Life: a Personal and Ethical Guide to Race, Normality, and the Human Genome Project*, Boston, Beacon, 2001].
- Sauer, Carl O., *Sixteenth Century North America*, Berkeley, University of California Press, 1971.
- Selby, John Millin, *The Eagle and the Serpent: the Spanish and American Invasions of Mexico: 1519-1846*, London, Hamilton, 1978.
- Serber, Robert, *The Los Alamos Primer: the First Lectures on How to Build and Atomic Bomb*, ed. Richard Rhodes, Berkeley, University of California Press, 1992.
- Silverberg, Robert, *The Pueblo Revolt*, New York, Weybright and Talley, 1970
- Simmel, Georg *Georg Simmel on Individuality and Social Forms: Selected Writings*, ed. Donald N. Levine and Morris Janowitz, Chicago, University of Chicago Press, 1971.
- Simmel, Georg "The Metropolis and Mental Life," reprinted from *Social Sciences III Selections and Selected Readings*, vol. 2, 14th ed. (University of Chicago, 1948). Translated by Edward A. Shils. Originally published as "Die Groostadt und das Geistesleben," in *Die Grosstadt. Jahrbuch derGehe-Stiftung* 9 (1903), p. 324.
- Simmel, Georg, *The Sociology of Georg Simmel*, translated, edited and introduced by Kurt H. Wolff, New York, The Free Press, 1950.
- Smith, Alice Kimball, *A Peril and a Hope: the Scientists' Movement in America 1945-1947*, Chicago, University of Chicago Press, 1965.
- Smith, Martin Cruz, *Stallion Gate*, New York, Ballantine, 1987.
- Stambaugh, Joan, *The Formless Self*, Albany, SUNY Press, 1999.

Stambaugh, Joan, *Impermanence is Buddha-Nature: Dogen's Understanding of Temporality*, Honolulu, University of Hawaii Press, 1990.

Stannard, David E., *American Holocaust: Columbus and the Conquest of the New World*, New York, Oxford University Press, 1992

Szasz, Ferenc Morton, *The Day the Sun Rose Twice: the Story of the Trinity Site Nuclear Explosion July 16, 1945*, Albuquerque, University of New Mexico Press, 1984.

Szilard, Leo, *The Voice of the Dolphins and Other Stories*, New York, Simon and Schuster, 1961.

Szilard, Leo, *Works*,

Stober, Dan, and Ian Hoffman, *A Convenient Spy: Wen Ho Lee and the Politics of Espionage*, New York, Simon & Schuster, 2001.

Tiller, Veronica E. Velarde, *The Jicarilla Apache Tribe : a History, 1846-1970*, Lincoln, University of Nebraska Press, 1983.

Trulock, Notra, *Code Name Kindred Spirit: Inside the Chinese Nuclear Espionage Scandal*, San Francisco, Encounter, 2002.

Thornton, Russell, *American Indian Holocaust and Survival: A Population History since 1492*, Norman, University of Oklahoma Press, 1987.

Titus, Costandina, *Bombs in the Backyard: Atomic Testing and American Politics*, Las Vegas, University of Nevada Press, 1986.

Udall, Stewart L. *The Myths of August: a Personal Exploration of our Tragic Cold War Affair with the Atom*, New York, Pantheon, 1995.

Ulam, Stanislaw M., *Adventures of a Mathematician*, New York, Scribner, 1976.

Vidal, Gore, *Perpetual War for Perpetual Peace: How We Got to Be so Hated*, Thunder's Mouth Press/Nation Books, 2002.

Wells, H.G., *The World Set Free: a Story of Mankind*, New York, E.P. Dutton & Company, 1914.

Wilson, Jane S., and Charlotte Serber, eds., *Standing by and Making Due: Women of Wartime Los Alamos*, Los Alamos, Los Alamos Historical Society, 1988.

Wirth, John D., and Linda Aldrich, *Los Alamos: the Ranch School Years, 1917-1943*, Albuquerque, University of New Mexico Press, 2003.

Witcover, Jules, *Sabotage at Black Tom: Imperial Germany's Secret War in America 1914-1917*, Chapel Hill, Algonquin, 1989.