NUCLEAR HISTORY: DEBATING THE MEANINGS OF THE MANHATTAN PROJECT NATIONAL HISTORICAL PARK

by

RAFFI EDWARD ANDONIAN

(Under the Direction of Eric MacDonald)

ABSTRACT

In September 2012, the decade-long effort to create the Manhattan Project National Historical Park culminated with the failure of the Manhattan Project National Historical Park Act in the 112th Congress of the United States. Throughout that year, the local, national, and international public debate about this potential national park remained contested and controversial, because the Manhattan Project created the world's first nuclear weapons, which were used by the United States in 1945 on Hiroshima and Nagasaki during the Second World War. Many layers of nuclear legacies, stemming from 1945 through the present day, pervade the public's historical memory of the Manhattan Project. Thus, this public debate raised questions about the roles of historic preservation, national parks, and historical interpretation. The 113th Congress might reconsider and vote again about the establishment the Manhattan Project National Historical Park, and this time Congress must recognize the historic significance of the Manhattan Project and allow for its preservation by approving the measure.

INDEX WORDS: history, historic preservation, Alois Riegl, James Marston Fitch, John Tunbridge, Gregory Ashworth, historical interpretation, Freeman Tilden, historical memory, pubic history, public memory, contested history, controversial history, difficult history, painful history, debated history, nuclear, nuclear history, atomic, atomic history, nuclear legacy, energy history, energy politics, energy policy, nuclear politics, nuclear energy, nuclear power, bomb, the bomb, uranium, plutonium, history of science, Second World War, World War II, World War 2, Cold War, Cold War history, Cold War memory, Cold War sites, monuments, historic sites, historic landscapes, cultural landscapes, national parks, national monuments, twentieth century, United State Congress, U.S. Congress, House of Representatives, Dennis Kucinich, Doc Hastings, U.S. Senate, Jeff Bingaman, 112th Congress, 113th Congress, Manhattan Project National Historical Park Act, legislative history, political history, Los Alamos, Oak Ridge, Hanford, Trinity Site, Hiroshima, Nagasaki, Japan, New Mexico, J. Robert Oppenheimer, Oppenheimer, Manhattan Project, National Park Service, Horace Albright, Department of Energy, Manhattan Project National Historical Park, Atomic Heritage Foundation, Cynthia Kelly, Cindy Kelly, Los Alamos Historical Society, Heather McClenahan, Los Alamos National Laboratory, Ellen McGehee, Los Alamos Scientific Laboratory, National Historic Landmarks, Los Alamos Scientific Laboratory National Historic Landmark District, Fuller Lodge, Los Alamos Scientific Laboratory NHL District, National Register of Historic Places, Keeper of the National Register of Historic Places, William Murtagh, Smithsonian Institution, National Air and Space Museum, Enola Gay, David Lowenthal, Edward Linenthal, Back of the Big House, John Michael Vlach, Library of Congress, framing nuclear history, understanding the power of nuclear history, creating nuclear history, remembering nuclear history, interpreting nuclear history, advocating nuclear history

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INTRODUCTION: FRAMING NUCLEAR HISTORY

In September 2012, the decade-long effort to create the Manhattan Project National Historical Park culminated with the failure of the Manhattan Project National Historical Park Act in the 112th Congress of the United States. Throughout that year, the local, national, and international public debate about this potential national park remained contested and controversial, because the Manhattan Project created the world's first nuclear weapons, which were used by the United States in 1945 on Hiroshima and Nagasaki during the Second World War. Thus, this public debate raised questions about the roles of historic preservation, national parks, and historical interpretation. Now, the 113th Congress must make the Manhattan Project National Historical Park a reality.

Throughout this public national debate the central question that emerges, and that which will drive the narrative of this thesis, is: why should a collection of historic sites with so many conflicting narratives be preserved? Within this overarching theme, this national park provokes related subsidiary questions as components that are increasingly important to the field of historic preservation as Cold War sites become more historic: what makes nuclear history so contentious? What was the Manhattan Project? How is this event portrayed in the historical memory of the local community, New Mexico, the United States, and Japan? Who is equipped to take on this difficult task? How can stories so complex with so many perspectives be interpreted fairly? And what does debating the

meanings of the Manhattan Project National Historical Park reveal about addressing nuclear history in the historic preservation field?

In order to explore these questions, this thesis investigates perspectives presented in public forums through various media as primary sources indicative of the perspectives and arguments that created and drove the public debate. This is not a legislative history but rather a study of public memory and historic preservation sparked by a piece of legislation related to a controversial topic of history. In trying to answer the above questions, the author relies on literature from a wide variety of disciplines in order to frame possible answers to these questions in accordance with academic and professional research in the realm of historic preservation. Thus, this thesis brings together scholars and approaches from the fields of history, geography, anthropology, art history, environmental history, architecture, urban studies, communications, religious studies, heritage tourism, interpretation, and historic preservation. This interdisciplinary analysis provides multiple lines of logic that come together to answer these increasingly important questions in the theory and practice of historic preservation.

As part of this approach, this thesis utilizes ideas from some of the foundational pillars of the modern field of historic preservation: James Marston Fitch and Alois Riegl. Fitch worked as a faculty member at Columbia University, where he established the prominent Graduate School of Architecture, Planning, and Preservation. Much of his training and practice derived from his background and experience as a leading architect. Decades earlier, Riegl grappled with some questions about defining monuments within the context of art history as the Conservator General of monuments in the Austro-

Hungarian Empire. His essays and life's work played a significant role in establishing art history as a discipline.

This thesis also relies on some of the seminal pioneers of historic preservation and interpretation within the National Park Service. For example, understanding the role of the National Park Service requires consideration of the influence and vision of Horace M. Albright, who served as the second Director of the National Park Service. For his work with the National Park Service, Albright received the Presidential Medal of Freedom, the highest civilian honor of the United States, in 1980. The perspective of William Murtagh, the first Keeper of the National Register of Historic Places, who tried to counterbalance the negative effects of urban renewal during his career, adds a valuable lens to questions about formal historic preservation related to the National Park Service, especially as the site in questions for the Manhattan Project National Historical Park is already a National Historic Landmark. Critical to understanding the importance and meaning of tangible historic sites is Freeman Tilden. Tilden, whose professional experience as a journalist, novelist, and playwright sharpened his skill for story, wrote essays studying interpretation at National Park Service sites for three decades beginning in 1951 that still remain the bedrock for interpretation training in the National Park Service.

In delving into questions about heritage, this thesis looks to scholars who devoted their entire careers to studying the construction and contestation of heritage. David Lowenthal, Emeritus Professor at University College London, has written extensively about perceptions of understanding the past, including a popular landmark.[1] John Tunbridge, Professor Emeritus at the Department of Geography and Environmental

[1] David Lowenthal, *The Past Is a Foreign Country* (Cambridge: Cambridge University Press, 1985).

Studies at Carleton University in Canada, has often collaborated with Gregory Ashworth, Professor of Heritage Management and Urban Tourism at the Faculty of Spatial Sciences of the University of Groningen in the Netherlands, in order to write about issues of heritage tourism. The perspective of Edward Linenthal, a university professor of history and religious studies who studies the development of the meanings of public symbols in the United States, provides insight specifically related to nuclear history, because he served on the advisory committee of the National Air and Space Museum during its 1995 planed exhibit featuring the Enola Gay.

In looking to such incidents for some context, this thesis draws upon other scholars with experience dealing with other historical topics that continue to cause debates as they remain contested in historical memory. John Michael Vlach, Professor of American Studies and Anthropology at George Washington University, served as part of the planning team for an exhibit in the Library of Congress about African slavery in the United States that never came into fruition due to major resistance. Richard Flores, Professor of Anthropology and Mexican American Studies at the University of Texas at Austin and Director of the Américo Paredes Center for Cultural Studies, has written masterfully about remembering the Alamo as a symbol in modern memory. These added lenses from not only diverse fields but also from different contexts of controversial public history help illuminate the larger questions that manifest themselves within the specific debate over the nuclear history.

This study of how the memory of nuclear history affects the dispute regarding the Manhattan Project National Historical Park is structured to illustrate the many stages of history and memory that led to the ongoing debate in 2013. Chapter 2 begins by

addressing the larger public discomfort with anything nuclear in the United States followed by a look into how this discomfort plays into perceptions of what the Manhattan Project National Historical Park could mean. Chapter 3 steps back in time to cover some of the history of the Manhattan Project during the Second World War. Chapter 4 covers and analyzes opinions voiced in national forums as the proposed Manhattan Project National Historical Park seemed to become closer to reality. Chapter 5 advocates a vision of what the Manhattan Project National Historical Park would mean based on foundational and recent theories of historic preservation as well as the current best practices in the field, particularly the National Park Service. The conclusion reinforces what becomes increasingly apparent throughout the thesis: that Congress must establish the Manhattan Project National Historical Park, despite significant public opposition, in order to acknowledge the historic significance of the Manhattan Project with the highest national recognition, which would allow for employing best practices in preserving the sites and stories with professionalism and balance.

CHAPTER 2

UNDERSTANDING THE POWER OF NUCLEAR HISTORY

"The ability to split atoms and extract energy from them was one of the more remarkable scientific achievements of the 20th century, widely seen as world-changing," reported *The Economist*, a leading global publication. "Intuitively," the newspaper continued, "one might expect such a scientific wonder either to sweep all before it or be renounced, rather than end up in a modest niche, at best stable, at worst dwindling." However, historic and social contexts have proven to shape the fate of the technology: "If nuclear power teaches one lesson, it is to doubt all stories of technological determinism. It is not the essential nature of a technology that matters but its capacity to fit into the social, political and economic conditions of the day." With its extensive Special Report assessment of nuclear energy in 2012, *The Economist* revealed just how relevant, charged, and ambivalent nuclear history remains. "To the public at large," the report gauged, "the history of nuclear power is mostly a history of accidents." Even in the twenty-first century, the 2011 disaster at Fukushima in Japan seemed to demonstrate that cold reality. Thus, nuclear power continues as "a creature of politics not economics."[2]

Nearly seven decades after the first use of nuclear weapons in the world, the political implications of all things nuclear make it a difficult topic to discuss in a public forum. Thus, when United States President Barack Obama called for "an all-out, all-of-the-above strategy that develops every available source of American energy," he avoided

[2] "The Dream that Failed," Special Report on Nuclear Energy, *The Economist*, 10 March 2012.

mentioning nuclear energy, despite the fact that one-fifth of the electricity in the United States is supplied by its 104 nuclear reactors. Despite U.S. dependence on nuclear energy, almost two-thirds of Americans oppose building new nuclear reactors, and hence it remains a politically unpopular issue to highlight. Globally, nuclear power provided 13% of the world's electricity in 2010 – although that number was down from 18% in 1996. Even in Japan, site of the world's first victims of nuclear weapons, 30% of electricity in 2010 derived from nuclear power plants, a source in use there since the 1960s – nevertheless, art referencing nuclear bombs remains taboo, even insulting and offensive. With the triple meltdown at Fukushima in 2011 easily classified as "the world's worst nuclear accident since the disaster at Chernobyl in the Ukraine in 1986," and the first approval by the Nuclear Regulatory Commission of the construction of a new nuclear reactor in the United States since the landmark Three Mile Island accident in 1979 – these three incidents denoting the most memorable of nuclear accidents – the question of the validity of nuclear technology has many reasons to stir up anew. In the realm of foreign policy, the political power of nuclear arms becomes apparent well after the end of the Cold War, as "worries about the dark side of nuclear power are resurgent, thanks to what is happening in Iran."[3] The domestic front is even more controversial, as confirmed by President Obama's comments and omission, particularly considering the mood created by fresh memories from Fukushima in Japan and by new projects in the United States allowed by the Nuclear Regulatory Commission. As *The Economist* surmised,

[3] *The Economist* had recently published a series of articles about Iran's nuclear capabilities (and surrounding politics and diplomacy), which was popular during the 2012 election cycle. See the 25 February 2012 issue just weeks prior to the Special Report on Nuclear Energy.

"America's anti-nuclear movement has been as quiet as its nuclear industry, but as one comes to life so will the other."[4]

Within such a climate, morally perplexing since the development of the first nuclear weapon in 1945, came the introduction of yet another motion that triggered a strong public reaction about the legacy of nuclear energy and its various applications. The Manhattan Project National Historical Park Act failed in the United States House of Representatives in September 2012 after months of effort in Congress to introduce and pass it, following several years of planning and study. The legislation would have created the Manhattan Project National Historical Park, a non-contiguous unit to be added to the National Park Service. The park would not acquire any property, but rather it would establish a National Park Service visitor center in each of three locations to interpreting existing United States Department of Energy sites: Oak Ridge, Tennessee; Hanford, Washington; and Los Alamos, New Mexico. All of these locations were critical to the historic Manhattan Project, which created the world's first nuclear weapons as an effort aimed to bring an end to the Second World War, and then ultimately used against Japan in Hiroshima and Nagasaki. These visitor centers would include information and interpretation (both formal and informal), offer exhibits and tours, and direct visitors to partners already present in the community, such as the Los Alamos Historical Museum or the Bradbury Science Museum in Los Alamos, site of the Manhattan Project's chief laboratory facility. In Los Alamos, local efforts to amend and add to the existing National Historic Landmark district began in order to include more resources in the interpretation by the new park (see Figure 1 and Figure 2). A struggle over how to

[4] "Nuclear Power: The 30-Year Itch," *The Economist*, 18 February 2012; "The Dream that Failed," Special Report on Nuclear Energy, *The Economist*, 10 March 2012; "Art after Fukushima," *The Economist*, 10 March 2012.

EXISTING LASL NHL DISTRICT MAP

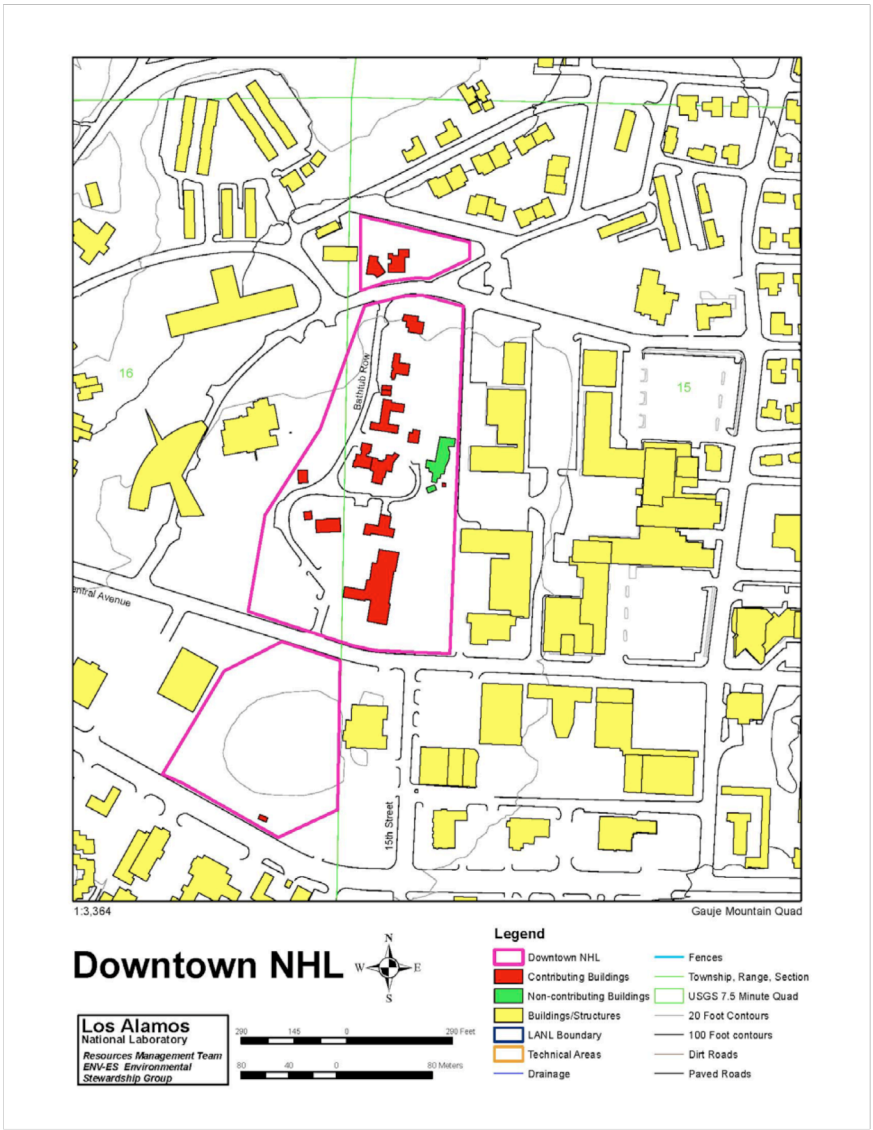

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Figure 1: National Historic Landmark District Map for Los Alamos Scientific Laboratory

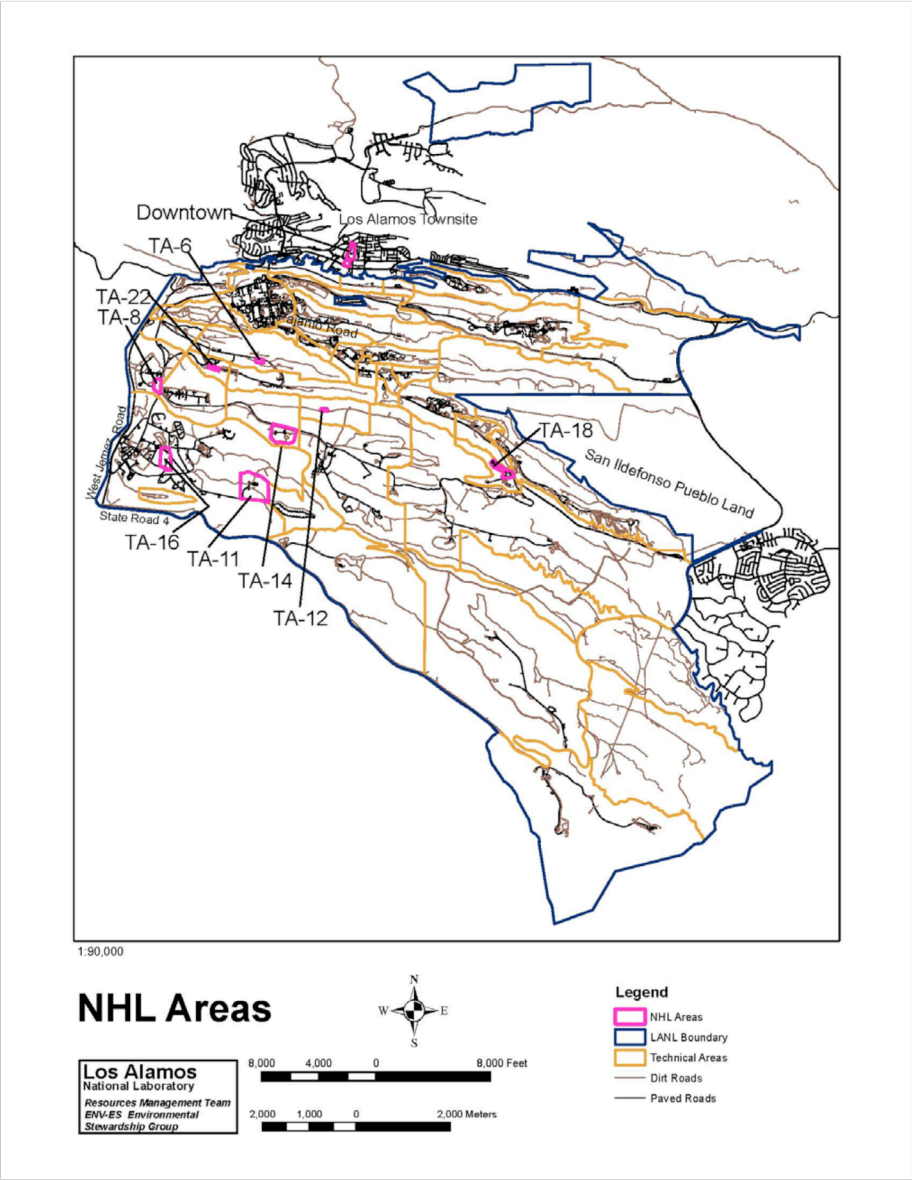

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Figure 2: Proposed New Addition to Replace the Existing National Historic Landmark District Map for Los Alamos Scientific Laboratory (currently under review)

understand nuclear history had been triggered – where it fit in United States and world history, and how it should be remembered.

The historiography of the nuclear bombs produced by the Manhattan Project is a divided one with many underlying emotions, politics, and contestations. Within a decade of the use of the atomic bomb and the end of the Second World War, Gar Alperovitz challenged the narrative that its use was to end the war and instead argued that its purpose was to intimidate the Soviet Union. His contemporary, Herbert Feis, had already argued in support of the official story: the aim of the use of the bomb was to end the war with the fastest pace and fewest American casualties possible. A generation later, historians led by Richard Rhodes, Robert James Maddox, and Robert Newman maintained this basic contention in response to revisionist interpretations like that of Alperovitz. They added that the invasion by the Soviet Union in Asia was not enough to have prevented the necessity of U.S. invasion in Japan, thus the bomb succeeded in its goal of averting the requirement for such a bloody invasion. David McCullough and Alonzo Hamby, biographers of President Harry S. Truman, who held the ultimate power to make the decision to drop the bombs, agreed with this interpretation. Alperovitz responded – along with others, such as Dennis Wainstock and a host of essayists in a volume edited by Kai Bird and Lawrence Lifschultz – by claiming that the United States had portrayed the use of the atomic bomb as an acceptable alternative by overlooking that Japan was ready to surrender, delaying involvement by the Soviet Union and then diminished its significance, and aggrandizing the number of American casualties expected in a potential invasion of Japan. John Dower and Ronald Takaki applied race as their primary analytical lens, citing Truman's racial views regarding Japanese and the larger cultural

context of American dehumanization of Japanese people, which made the use of the atomic bomb less uncomfortable than it might have been against an enemy like Germany. Thus, historical interpretations remain divided.[5]

These debates about the past are rooted in the present. As the anthropologist Richard Flores explains, "Stories of the past envelop us: they inscribe our present and shape our future; stories of the past are linked to the formation of selves and others in a complex tapestry of textured narratives." Viewed from the present, the past pervades the current and contemporary – the now. "Remembering is a deeply embedded social practice that informs the present," Flores describes. J. E. Tunbridge and G. J. Ashworth, international scholars of heritage tourism, delineate further distinctions while maintaining an understanding of remembrance similar to that of Flores: "History is what a historian regards as worth recording and heritage is what contemporary society chooses to inherit and to pass on." That is, "the past" is "what has happened," "history" is "selective attempts to describe this [past]," and "heritage" is "a contemporary product shaped from

[5] Gar Alperovitz, *Atomic Diplomacy: Hiroshima and Potsdam: The Use of the Atomic Bomb and the American Confrontation with Soviet Power* (New York: Simon & Schuster, 1965); Herbert Feis, *The Atomic Bomb and the End of World War II* (Princeton: Princeton University Press, 1961, 1966); Richard Rhodes, *The Making of the Atomic Bomb* (New York: Simon & Schuster, 1986); Robert James Maddox, *Weapons for Victory: The Hiroshima Decision Fifty Years Later* (Columbia: University of Missouri Press, 1995); Robert P. Newman, *Truman and the Hiroshima Cult* (East Lansing: Michigan State University Press, 1995); David McCullough, *Truman* (New York: Simon & Schuster, 1992); Alonzo L. Hamby, *Man of the People: A Life of Harry S. Truman* (New York: Oxford University Press, 1995); Gar Alperovitz, *The Decision to Use the Atomic Bomb and the Architecture of an American Myth* (New York: Alfred A. Knopf, 1995); Dennis D. Wainstock, *The Decision to Drop the Atomic Bomb* (Westport: Praeger Publishers, 1996); Kai Bird and Lawrence Lifschultz, eds., *Hiroshima's Shadow* (Stony Creek: Pamphleteer's Press, 1998); John Dower, *War Without Mercy: Race and Power in the Pacific War* (New York: Pantheon, 1986); Ronald Takaki, *Hiroshima: Why America Dropped the Atomic Bomb* (Boston: Little, Brown & Company, 1995). For an overview of historiography about the decision to drop the world's first nuclear weapon, see: J. Samuel Walker, "Recent Literature on Truman's Atomic Bomb Decision: A Search for Middle Ground," *Diplomatic History*, Vol. 29, No. 2, April 2005, pp. 311-334.

history." The heritage of atrocity, according to Tunbridge and Ashworth, carries particular importance and intensity:

> *It is disproportionately significant to many heritage users. Its memory can so dominate the heritage of individuals or social and political groups, as to have profound effects upon their self-conscious identity to the extent that it may become almost a sine qua non of group cohesion in sects, tribes or states, powerfully motivating their self-image and aspirations, over many centuries… The dissonance created by the interpretation of atrocity is not only particularly intense and lasting but also particularly complex for victims, perpetrators and observers.*[6]

Interpreting the immediate outcomes of the Manhattan Project – victory versus defeat, lives saved versus lives lost, perceptions of good versus evil, the end of a world war versus the beginning of a new kind of war – reveals just how complex, multifaceted, sensitive, dissonant, and influential historical memory, understanding, and interpretation could become. The eminent geographer David Lowenthal points out, "Heritage is mandatory. It comes to us willy-nilly, and cannot be shed however shaming it may be." Despite a failure by prior generations of historic preservations to consider a variety of perspectives, as indicated by the interdisciplinary academicians Max Page and Randall Mason, "they can now be part of the ongoing reevaluation of American history." Art historians Robert Nelson and Margaret Olin note, "All complex societies, it may be argued, invest cultural and actual capital in structures akin to monuments." The

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[6] Richard Flores, *Remembering the Alamo: Memory, Modernity, and the Master Symbol* (Austin: University of Texas Press, 2002), x, xvi; J. E. Tunbridge and G. J. Ashworth, *Dissonant Heritage: The Management of the Past as a Resource in Conflict* (Chichester: John Wiley & Sons, 1996), 6, 20, 94, 95.

Manhattan Project National Historical Park is simultaneously what Alois Riegl, the first Conservator General of monuments in the Austro-Hungarian Empire, described over a century ago as an "intentional monument" (the park itself with significance determined by the creators) and an "unintentional monument" (the project that became a monument only as a product of later events rather than the full intent of the historical actors) – in essence, an intentional monument to an unintentional monument.[7]

Historical understanding, particularly about such textured stories, relies on a sense of place – the power of place. Heritage anthropologist Barbara Bender explains, "People's sense of place and landscape thus extends out from the locale and from the present encounter and is contingent upon a larger temporal and spatial field of relationships." As Greg Dickinson, Carole Blair, and Brian L. Ott – three professors of communication studies – contend, "The rhetorical consequentiality of memory is best understood through the analysis of particular memory places… complex relations among memory, rhetoric, and place." More than half a century ago, Freeman Tilden, whose work captured the philosophy and substance of interpretation still used as a foundation today, highlighted the deep connection of understanding intangible concepts at a tangible location: "A kind of elective education that is superior in some respects to that of the classroom, for here he meets the Thing Itself." More recently, in analyzing a different contested history with much impact, power, memory, and mythology, anthropologist

[7] David Lowenthal, "The Heritage Crusade and Its Contradictions," in Max Page and Randall Mason, eds., *Giving Preservation a History: Histories of Historic Preservation in the United States* (New York: Routledge, 2004), 20; Max Page and Randall Mason, "Rethinking the Roots of the Historic Preservation Movement," in Max Page and Randall Mason, eds., *Giving Preservation a History: Histories of Historic Preservation in the United States* (New York: Routledge, 2004), 15; Robert S. Nelson and Margaret Olin, "Introduction," in Robert S. Nelson and Margaret Olin, eds., *Monuments and Memory, Made and Unmade* (Chicago: University of Chicago Press, 2003), 4; Alois Riegl, "The Modern Cult of Monuments: Its Character and Its Origin," translated by Forster and Ghirardo, *Oppositions* 25 (Fall 1982), pp. 21-56.

Richard Flores remarks about his experience, applicable to the geopolitically and culturally influential history and memory of the Manhattan Project and the creation and use of the world's first nuclear weapon: "Because of the interreferentiality between the cultural memory of the Alamo and the place itself, the full force of this site can only be experienced ethnographically, which is to say, by one's presence." Art historians Robert Nelson and Margaret Olin recognize the power of monuments (which a national park might be considered), "Social processes surrounding the monument begin even before it is seen. Travel to the monument, like all forms of pilgrimage, transforms object and beholder." Thus, William Murtagh, the first Keeper of the National Register of Historic Places, observed that efforts in historic preservation continue to increase "thanks to an ever-enlarging preservation-oriented constituency which comprehends the value of retaining the sense of time, place, and locality in a country of great diversity and vast dimensions." Whereas nineteenth-century historic preservation was fueled by "patriotism… to the exclusion of any of the other interests," today "the federal government's role in preservation grew" to what it has become with many diversified concerns in mind.[8]

The roles of publicly protected sacred spaces and the significance of sense of place in influencing historical understanding have changed over time. Edward Linenthal,

[8] Barbara Bender, "Introduction," in Barbara Bender and Margot Winer, eds., *Contested Landscapes: Movement, Exile and Place* (Oxford: Berg, 2001), 6; Greg Dickinson, Carole Blair, and Brian L. Ott, "Rhetoric/Memory/Place," in Greg Dickinson, Carole Blair, and Brian L. Ott, eds., *Places of Public Memory: The Rhetoric of Museums and Memorials* (Tuscaloosa: University of Alabama Press, 2010), 32; Freeman Tilden, *Interpreting Our Heritage* (Chapel Hill: University of North Carolina Press, 1957, 1967, 1977, 2007), 25; Richard Flores, *Remembering the Alamo: Memory, Modernity, and the Master Symbol* (Austin: University of Texas Press, 2002), 20; Robert S. Nelson and Margaret Olin, "Introduction," in Robert S. Nelson and Margaret Olin, eds., *Monuments and Memory, Made and Unmade* (Chicago: University of Chicago Press, 2003), 6; William J. Murtagh, *Keeping Time: The History and Theory of Preservation in America* (New York: Sterling Publishing Co., 1988), 165, 12.

a professor of religious studies who explores the creation of the meanings of public symbols, delineates two ways contested historic sites like battlefields continue to function in the United States:

> *On the one hand, they are ceremonial centers where various forms of veneration reflect the belief that the contemporary power and relevance of the 'lessons' of the battle are crucial for the continued life of the nation. Furthermore, many people believe that the patriotic inspiration to be extracted from these sacred places depends not only on proper ceremony but on memorialized, preserved, restored, and purified environment. On the other hand, these battlesites are civil spaces where Americans of various ideological persuasions come, not always reverently, to compete for the ownership of powerful national stories and to argue about the nature of heroism, the meaning of war, the efficacy of martial sacrifice, and the significance of preserving the patriotic landscape to the nation.*

Clearly, the meaning of a historic site with a contested history is not universally agreed upon by the American public, which leaves much room for public debate, and perhaps justifies their public presence and function, as interpretation of these sites diversifies and visitors contemplate the meanings of these places. In his landmark work on historic preservation, James Marston Fitch called attention to the fact that "before modern times, the enjoyment and consumption of most cultural artifacts were public acts." Despite a period of the privatization of the cultural artifact, Fitch emphasized, "It is safe to assume that every independent nation in the world today is committed, at least in principle, to the theory that the protection of the national artistic and historic heritage is a responsibility of

the state." Fitch asserted, "Organized society has always recognized the educational role of historic sites and monuments."[9]

In the United States, the National Park Service has been the chief federal organ of historic preservation, since the New Deal era. By the 1920s, the National Park Service began, as environmental historian Alfred Runte puts it, "to look beyond its traditional role… by actively promoting additions to the system whose significance was distinctly historical or archaeological rather than scenic." After beginning his term as the second Director of the National Park Service, Horace M. Albright "campaigned for recognition of the agency as the appropriate custodian of all federal historic and archaeological sites." After a meeting between Albright and the U.S. President in 1933, Franklin Delano Roosevelt signed an executive order that transferred sixty-four national monuments, military parks, battlefield sites, cemeteries, and memorials from the Department of War, U.S. Forest Service, and District of Columbia to the National Park Service – instantly doubling the size of the national park system. As the historian Denise Meringolo maintains, Albright's "understanding of the Park Service mission, his vision for expansion, and his political savvy enabled the transformation of a landscape long defined as scenic and scientific into one that might be recognized as historic." With the increase of domestic tourism to national parks over the following decades, National Park Service professionals "were idealistic, believing park education could open visitors to new experiences." These sites were no longer merely monuments of reverence but rather were changing into places of education through the implementation of new approaches that

[9] Edward Tabor Linenthal, *Sacred Ground: Americans and Their Battlefields* (Champaign: University of Illinois Press, 1991, 1993), 1; James Marston Fitch, *Historic Preservation: Curatorial Management of the Built World* (New York: McGraw-Hill, 1982), 3, 399, 403.

avoided simple confirmation of what visitors already believed prior to their arrival at these national park sites.[10]

Consequently, the National Park Service underwent a transformation between the 1930s era of the New Deal and the 1960s era of the National Historic Preservation Act. With the issuance of Executive Order 6166 by President Roosevelt, "the responsibility for preservation within the federal government" became "transferred" to the National Park Service, as historian Hal Rothman analyzes the historical moment. In line with Runte's interpretation, Rothman understands the 1933 reorganization of the National Park Service as making the agency "a national entity with responsibility for much more than scenery." These groundbreaking developments "put the agency in the field of historic preservation in a manner that no federal agency had previously attempted," argues Rothman, placing the National Park Service at the "forefront of historic preservation." The political thrust redefined not only the roles of the National Park Service and the larger federal government in historic preservation but also Americans' cultural conceptions of the United States. This revolution meant, according to Rothman, "Americans no longer had to look to Europe and the ancient world to see their cultural roots. The North American continent had a human past worthy of consideration." In essence, the organized federal effort in historic preservation created a history and a memory – a heritage.[11]

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[10] Alfred Runte, *National Parks: The American Experience* (Lincoln: University of Nebraska Press, 1979, 1987), 219, 219-220; Denise D. Meringolo, *Museums, Monuments, and National Parks: Toward a New Genealogy of Public History* (Amherst: University of Massachusetts Press, 2012), xxxi;

[11] Hal Rothman, *America's National Monuments: The Politics of Preservation* (Lawrence: University Press of Kansas, 1989), 187, 209, 208-209.

In the case of the use of the world's first nuclear weapon, remembering the history and forming a heritage has already proven a contentious challenge. In order to commemorate the fiftieth anniversary of the dropping of the first atomic bomb on Hiroshima, the National Air and Space Museum (a Smithsonian Institution) prepared an exhibit to debut in 1995 about the impacts of this weapon, with the Enola Gay – the plane that carried the nuclear bomb to its target in 1945 – as its centerpiece. Richard Kohn, a prominent military historian who worked as the chief of air force history for the United States Air Force and served on multiple advisory committees for the National Air and Space Museum, later captured the conflicting symbolism of the Enola Gay "emphasizing either innovative technological achievement or the mass death of enemy civilians." Edward Linenthal, a professor of religion and American culture who served on the advisory committee of the National Air and Space Museum during the exhibit with the Enola Gay that never came into fruition, identified the crux of these differing stories "of a weapon that brought peace and victory, and of a weapon that brought destruction and fear to the world." These emotionally charged and sometimes ideologically driven disagreements about constructing heritage led to a national debate in 1995 filled with such vitriol that it "reminds us the ways in which the cultural fallout from the bomb that destroyed Hiroshima still reaches into our own time, of how we continue to underestimate the destabilizing force of the blast." Despite Linenthal's experience working on projects with volatile histories and fiery memories such as Pearl Harbor and the United States Holocaust Memorial Museum, the reaction to the planned exhibit about the Enola Gay and the atomic bomb was so explosive that Linenthal later admitted that "nothing in my experience with memorial exhibits prepared me for what happened" in

response to the script for the exhibit that ultimately failed to quell enough opposition to succeed in realization.[12]

Nearly two decades later, opposition to public remembrance of the origins, impact, and legacies surrounding the world's first nuclear weapon would again block federal efforts to recognize this history. In 2012, the Manhattan Project National Historical Park Act failed to get enough votes in the United States House of Representatives. The bill would have created the Manhattan Project National Historical Park, dedicated to protecting the key sites of arguably the most significant event of the twentieth-century that reshaped the history of the world in multiple ways at different levels. This time, however, the concerns raised in protest were from the opposite side, fearing too much glorification of American might and force rather than too much veneration of American enemies. In the case of the *Enola Gay* exhibit in 1995, "veterans' groups, political commentators, social critics, and politicians had charged that the exhibition script dishonored the Americans who fought the war by questioning the motives for using the bombs, by portraying the bombs as unnecessary to end the war, and by sympathizing too much with the Japanese killed by the bombs and, by implication, with the Japanese cause." In 2012, publicly-voiced opposition to the Manhattan Project National Historical Park came from those who worried that protecting these sites,

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[12] Richard H. Kohn, "History at Risk: The Case of the *Enola Gay*," in Edward T. Linenthal and Tom Engelhardt, eds., *History Wars: The Enola Gay and Other Battles for the American Past* (New York: Henry Holt and Company, 1996), 145; Tom Engelhardt and Edward T. Linenthal, "Introduction: History Under Siege," in Edward T. Linenthal and Tom Engelhardt, eds., *History Wars: The Enola Gay and Other Battles for the American Past* (New York: Henry Holt and Company, 1996), 2, 6; Edward T. Linenthal, "Anatomy of a Controversy," in Edward T. Linenthal and Tom Engelhardt, eds., *History Wars: The Enola Gay and Other Battles for the American Past* (New York: Henry Holt and Company, 1996), 10. For a scholarly monograph about the *Enola Gay* exhibit and its cultural implications about historical memory, see: Robert P. Newman, *Enola Gay and the Court of History* (New York: Peter Lang Publishing, 2004).

particularly by designation as national treasures through the National Park Service, would mean celebrating the use of the bomb in the past and possibly in the future via simplistic narratives about American achievement, triumph, and righteousness. The subsequent public debate raised questions about the role of historic preservation, the meaning of national parks, and the legacies of the atomic bomb (the world's first nuclear weapon).[13]

[13] Richard H. Kohn, "History at Risk: The Case of the *Enola Gay*," in Edward T. Linenthal and Tom Engelhardt, eds., *History Wars: The Enola Gay and Other Battles for the American Past* (New York: Henry Holt and Company, 1996), 140.

CHAPTER 3

CREATING NUCLEAR HISTORY

Project Y, Manhattan Engineer District, New Mexico, USA

Having learned that German scientists were working on building an atomic bomb, the United States military decided in 1942 to work toward doing the same. Though Americans were not fully aware of German progress on achieving the bomb, the U.S. military believed that this project, if successful, could bring the Second World War to an end. Just earlier in the year, Enrico Fermi had led a group of scientists in Chicago in creating the world's first human-made nuclear chain reaction. Still, in order to turn their understanding of this principle and the achievement of this experiment into an atomic bomb, they needed at least a year of more scientific research and technological advancements, even if they were intensely focused on such a mission.[14]

Perhaps the biggest challenge was to prepare the fissionable material for the bomb. A chain reaction occurs when neutrons from fission (a type of nuclear reaction) cause further fission that is enough to sustain fission – fission was the key process that defined the atomic bomb, which is a type of nuclear weapon. Scientists at the time knew of at least one kind of uranium nucleus that would divide upon absorbing a neutron, which then released energy and more neutrons. However, almost all naturally occurring uranium was too heavy an isotope to fission when capturing neutrons, and thus it was not

[14] Los Alamos Scientific Laboratory, *Los Alamos: Beginning of an Era, 1943-1945* (Los Alamos: Los Alamos Historical Society, 2008), 6-7.

useful for building a bomb based on chain reaction. Uranium-235, a lighter isotope that could indeed fission and thus be used in a potential bomb, composed only .7% of naturally occurring uranium. Thus, plant facilities in Oak Ridge, Tennessee, were constructed in 1942 in order to separate U-235 from the heavier isotopes in naturally occurring uranium and produce enriched uranium that contained more than the natural proportion of U-235. Still, obstacles remained: U-235 was so rare that there was not enough to create even a sample of enriched uranium to observe it in a laboratory.[15]

Just a few short years prior to the Manhattan Project, scientists in Berkeley, California, had created plutonium, which is not naturally occurring. The much more abundant and heavier isotope of uranium could capture neutrons to make plutonium, which was observed to be a fissionable element. Plutonium was a new discovery, and it therefore was also scarce in quantity – perhaps enough all together visible only by microscope. As a result, nuclear reactors in Oak Ridge, Tennessee, and Hanford, Washington, were built to produce uranium needed to supply the neutrons necessary to create plutonium.[16]

American scientists wanted to move fast in studying the two possible materials of Uranium-235 and Plutonium-239, even though extremely small quantities were available, in order to catch and exceed the German efforts at nuclear weapons. While the construction of plants in Oak Ridge and Hanford to create the Manhattan Engineer District of the War Department began in order to provide more physical material for study and use in bombs, scientists at the Los Alamos Laboratory had already started on Project Y to research the science and develop the technology so they would be ready

[15] Los Alamos Scientific Laboratory, *Los Alamos: Beginning of an Era, 1943-1945* (Los Alamos: Los Alamos Historical Society, 2008), 6-7.
[16] Ibid.

when they obtained the larger amounts of the necessary uranium and plutonium. Meanwhile, these scientists in Los Alamos had incredibly tiny amounts with which to work.[17]

J. Robert Oppenheimer had a large task in front of him at the Los Alamos Laboratory: to lead the team to conduct the research, develop the technology, and create the bomb all with the pressure and time constraints of war. Located near a 200-square-mile caldera, the laboratory was constructed on the Pajarito Plateau, which is the long and narrow plateau that extends from the mountain range along this caldera. A high altitude volcanic bench at about 7,000 feet elevation surrounded by mountain peaks reaching 10,000 feet and filled with numerous kinds of trees, the Pajarito Plateau's steep canyon walls carved from volcanic lava flows provided a great location for such a secretive project. Oppenheimer knew about the area from time spent at his summer home in the region. He enjoyed the general surroundings, and he had also visited the Los Alamos Ranch School located on the Pajarito Plateau itself. He remembered that the plateau fit the site criteria for this top-secret national security project. As a publication by the laboratory itself later explained, "[1] the site had to have adequate housing for 30 scientists; [2] the land had to be owned by the government or easily acquired; [3] it had to be large enough and uninhabited so as to permit safe separation of sites for experiments; [4] easy control of access for security and safety reasons was necessary; [5] and the place had to have enough cleared land, free of timber, to locate additional buildings at once."[18]

Because it was surrounded by national forest and cheap grazing land with few private properties, and because it included the infrastructure and buildings of the Los

[17] Ibid.
[18] Los Alamos Scientific Laboratory, *Los Alamos: Beginning of an Era, 1943-1945* (Los Alamos: Los Alamos Historical Society, 2008), 7, 9, 14.

Alamos Ranch School, the Pajarito Plateau met the military's criteria. However, before the Los Alamos Ranch School students had even left the area, the school's couple dozen or so buildings already proved insufficient for housing what already became a population of 300 for the project – and 1500 including the construction crews. The area, however, could not be called Los Alamos in order to help maintain security, and thus it acquired the nickname "the Hill." Beginning on 1 January 1943, the University of California operated the laboratory as a nonprofit contract with the Manhattan Engineer District. Though recruiting administrative and technical positions proved to be difficult because the project information was incomplete and the location was remote, top scientists from various laboratories around the country and world were attracted by the challenge and significance of the project.[19]

Throughout the first half of 1943, hundreds of families made the journey, even though wives were kept unaware of the work that was being done by their husbands for the sake of security. As the wife of one of the project's scientists wrote, "I felt akin to the pioneer women accompanying their husbands across uncharted plains westward, alert to dangers, resigned to the fact that they journeyed, for weal or woe, into the Unknown." It was a new experience for many of these people, who felt their world changed quickly. Oppenheimer himself captured the sentiment of many he recruited: "The notion of disappearing into the desert for an indeterminate period and under quasi-military auspices disturbed a good many scientists and the families of many more." Hence, Dorothy McKibbin would received the new arrivals at now-famous 109 East Palace Avenue in

[19] Los Alamos Scientific Laboratory, *Los Alamos: Beginning of an Era, 1943-1945* (Los Alamos: Los Alamos Historical Society, 2008), 14, 17, 19.

Santa Fe. She addressed concerns, comforted the weary, and arranged for them and their belongings to make it up the Hill.[20]

The newcomers encountered a town that was something of a "frontier" in many ways. For one, its built environment was clearly designed to be temporary; quickly built cheap buildings were strewn about the site without much town planning. As one of the early residents observed, "It was difficult to locate any place on that sprawling mesa which had grown so rapidly and so haphazardly, without order or plan." Amidst this chaotic layout were the log and stone buildings of the Ranch School: Fuller Lodge became a cafeteria, the classrooms were used for shops like the Post Exchange, and the former masters' houses were the homes of the project's top administrators. These fine buildings soon became surrounded by hastily built roads, apartments, barracks, dormitories, and buildings for the incipient laboratory – all built in a rush to finish the war. It took a couple of decades for housing to finally catch up with demand. Despite the aim of a world-class project, this frontier type of town had little infrastructure in other ways: one telephone line in 1943 (three by 1945), one mail box (in Santa Fe), no laundry or hospital services until 1944, and insufficient water for the boom-town.[21]

Yet, this frontier town had much in the way of social and cultural institutions. In the first year of the project, a town council was created to advise the community (military) administration. The town established a nursery school as well as a 12-grade school system. Concerts, theaters, and movies were part of the thirty recreational and cultural organizations that formed in town during the war. Residents established the roots

[20] Los Alamos Scientific Laboratory, *Los Alamos: Beginning of an Era, 1943-1945* (Los Alamos: Los Alamos Historical Society, 2008), 19.
[21] Los Alamos Scientific Laboratory, *Los Alamos: Beginning of an Era, 1943-1945* (Los Alamos: Los Alamos Historical Society, 2008), 19, 21.

and practices that soon thereafter founded Los Alamos University, which offered credits that became accepted by universities across the country, organized lectures and published notes in nuclear physics and chemistry by some of the world's top scientists. All of this was situated within a beautiful landscape with the volcanic Jemez and towering Sangre de Cristo mountains on either side of the expansive Española Valley. This landscape also helped keep the project a secret – although it was a landscape that residents were barred from describing, for fear of giving away their location.[22]

Maintaining secrecy was critical for the success of the project. A barbed wire fence with armed guards surrounded Los Alamos, and the town was in many ways cut off from its surrounding region and beyond. Those who worked for the laboratory were instructed to avoid traveling more than 100 miles from Los Alamos. Rules prohibited them from personal contact with their relatives – even an unplanned encounter with a friend outside the project was supposed to be reported to security. Famous scientists used false names without disclosing their occupations. Driver licenses, vehicle registrations, bank accounts, income tax returns, insurance policies, and food and gas rations were all issued not to names but instead to numbers. All mail was received in one Post Office Box in Santa Fe, and outgoing mail was censored. Such tight regulation took its toll, as one resident recounted, "I couldn't write a letter without seeing a censor poring over it. I couldn't go to Santa Fe without being aware of hidden eyes upon me, watching, waiting to pounce on that inevitable misstep. It wasn't a pleasant feeling." This a quest for uncompromised secrecy affected not just lifestyles but work, too: whereas the military attempted to compartmentalize the different scientific departments and projects in order

[22] Los Alamos Scientific Laboratory, *Los Alamos: Beginning of an Era, 1943-1945* (Los Alamos: Los Alamos Historical Society, 2008), 21-22.

to avoid knowledge of the whole project, Oppenheimer succeeded in insisting on collaboration through weekly colloquia.[23]

With these collaborations, many elements of the project had to come together, and these could be divided into two phases: first, research in physics, chemistry, and metallurgy; second, technology advancement into engineering ordinance design. Although the latter stage was originally planned to include military commissioning of the scientists, these men remained civilians, unless they joined the laboratory staff through the Army's Special Engineer Detachment (SED). Between 1943 and 1945, the number of laboratory personnel multiplied ten-fold from 250 to 2,500 (half of them from the military, primarily of the SED). Regarding the atmosphere within this group, Oppenheimer observed, "Almost everyone knew that this job, if it were achieved, would be part of history. This sense of excitement, of devotion, and of patriotism, in the end, prevailed." This team focused first and foremost on scientific research, which later produced the hardware that changed the world. However, the labor put into nuclear technology was far less than the effort directed toward the nuclear science.[24]

Most of the materials for the project were prepared away from Los Alamos – in Oak Ridge, Tennessee, and Hanford, Washington. Because uranium is not a gas, it had to be combined with fluorine in order to produce uranium hexafluoride, which is a vaporized compound. This gaseous diffusion process slightly increased the concentration of Uranium-235 in each stage of separation. In Oak Ridge, thousands of phases with thousands of miles of piping and hundreds of acres of barriers allowed the production of

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[23] Los Alamos Scientific Laboratory, *Los Alamos: Beginning of an Era, 1943-1945* (Los Alamos: Los Alamos Historical Society, 2008), 22.
[24] Los Alamos Scientific Laboratory, *Los Alamos: Beginning of an Era, 1943-1945* (Los Alamos: Los Alamos Historical Society, 2008), 22, 28.

very highly enriched uranium hexafluoride. Using this enriched gas to make uranium metal caused a very low concentration of Uranium-238, which was unfit for making a bomb. By 1944, using the increased supply of the incredibly rare Uranium-235, Oak Ridge was producing highly enriched uranium compounds by the kilogram.[25] Similarly, by the same year, reactors in Hanford began producing the quantities of plutonium necessary for the bomb cores. With plutonium nitrate from Hanford and fissionable material from uranium and plutonium production in Oak Ridge, Los Alamos scientists now had to purify both the uranium and plutonium in order to make it suitable for use in a bomb.[26]

Just over two years after the first scientists had arrived in Los Alamos, the project achieved the world's first nuclear weapon with the successful test detonation conducted on 16 July 1945 at the Trinity Site near Alamogordo, New Mexico. Three weeks later, the United States dropped a nuclear bomb on the city of Hiroshima in Japan; and three days after that, on Nagasaki. Japan surrendered five days later. Manhattan Project had accomplished its mission: to end the war.[27]

Preserving History, Local and Global

As significant as such world-changing history is, the history of Los Alamos and the surrounding area has many layers that run deeper than the twentieth-century. Petroglyphs, pottery sherds, and obsidian flakes show evidence of human occupation

[25] Los Alamos Scientific Laboratory, *Los Alamos: Beginning of an Era, 1943-1945* (Los Alamos: Los Alamos Historical Society, 2008), 30-31.
[26] Los Alamos Scientific Laboratory, *Los Alamos: Beginning of an Era, 1943-1945* (Los Alamos: Los Alamos Historical Society, 2008), 31-32.
[27] Los Alamos Scientific Laboratory, *Los Alamos: Beginning of an Era, 1943-1945* (Los Alamos: Los Alamos Historical Society, 2008), 23, 61.

dating from the twelfth-century, with indigenous presence for millennia. Ancestral Pueblo sites saturate the landscape at Bandelier, Puye, Tsirege, Tsiping, and Tsankawi. Indigenous peoples lived atop mesas or in cliff dwellings, growing corn, beans, and squash as staples. The Pajarito Plateau itself had permanent residents until approximately the sixteenth-century, when lack of enough water caused people to move toward the Rio Grande – part of a larger trend of movement toward the river during the period. The descendants of these ancient peoples are today part of Ohkay Owingeh, Santa Clara, San Ildefonso, Pojoaque, Nambe, and Tesuque. The rich archaeology of the Pajarito Plateau was first recorded in the 1880s by Adolf Bandelier, namesake of Bandelier National Monument.[28]

It was not until the nineteenth-century that people once again frequented the Pajarito Plateau and its vicinity. First, Spanish herders made their way into and through the lush landscape of the Valle Grande, a nearly two-hundred square-mile caldera (the saucer left behind when a volcano collapses on itself). During the 1880s, the space was used for maneuvers by soldiers from Fort Marcy, located in nearby Santa Fe. During the same time, homesteaders began settling on the Pajarito Plataeu, where thirty-four individuals completed the process of homesteading – the applicant received free land from the government to improve and earn the patent for the land. Without irrigation at such a high elevation, the growing season was limited, although homesteaders managed to grow pinto beans, wheat, corn, squash, peas, pumpkins, potatoes, and some other vegetables. During the winter, most families departed from the colder weather of the high

[28] Los Alamos Scientific Laboratory, *Los Alamos: Beginning of an Era, 1943-1945* (Los Alamos: Los Alamos Historical Society, 2008), 9-11.

altitude to surrounding areas with extended family and schools for children (who helped with planting in the spring, tending to crops in summer, and harvesting in fall).[29]

During this era, many visitors came through nearby Frijoles Canyon. A retired judge and his wife established Ten Elders Ranch, whose guests included archaeologist Edgar L. Hewitt, journalist and author Charles Lummis, and naturalist founder of the Boy Scout movement in America, Ernest Thompson Seton. Bandelier National Monument was created in 1916, and there was no road into the canyon until 1933. By 1939, with the completion of a new lodge and visitor center by the Civilian Conservation Corps, the old guest lodges were demolished. One visitor to the region during this time was J. Robert Oppenheimer, whose health needs brought him to New Mexico, including the Jemez Mountains, where he encountered the Los Alamos Ranch School.[30]

The Los Alamos Ranch School offered a classical education as well as preparation for outdoor living. In 1917, Ashley Pond opened the Ranch School, which was near the site of the failed Pajarito Club for hunting and fishing that he had established on the land of Harold H. Brook, an advanced agriculturist who had purchased his holdings from the family of Antonio Sanchez, the first homesteader on the Pajarito Plateau. The unpolluted environment away from urban areas was part of the appeal of the school, as it helped students with respiratory problems and encouraged outdoor discipline and self-sufficiency – unlike most college preparatory schools, the Los Alamos Ranch Schools integrated with the Boy Scouts, even adopting their uniforms. Activities included

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[29] Los Alamos Scientific Laboratory, *Los Alamos: Beginning of an Era, 1943-1945* (Los Alamos: Los Alamos Historical Society, 2008), 9; Los Alamos Historical Society, Los Alamos County, and Fuller Lodge/Historic Districts Advisory Board, *Los Alamos Homestead Tour*, brochure, 2012.

[30] Los Alamos Scientific Laboratory, *Los Alamos: Beginning of an Era, 1943-1945* (Los Alamos: Los Alamos Historical Society, 2008), 11-12, 14.

swimming, fishing, hunting, hiking, basketball, tennis, horseback riding, skating, skiing, woodwork, and music. With studies that incorporated Latin, geometry, art, and science, the school for boys aged 12 to 18 aimed to cultivate responsibility through both academic and physical development and ultimately to place them into elite eastern universities.[31]

This was the society, composed of an elite school and dozens of homestead families, that existed atop the Pajarito Plateau when the Manhattan Project arrived. One year after the Japanese attack on Pearl Harbor, A. J. Connell received notice from the Secretary of War that the United States would soon take over the Ranch School buildings for use in the war effort. Therefore, school administrators cancelled the Christmas recess of 1942, and accelerated the curriculum in order to ensure that the school year was complete by February 1943. When the last graduates left the school as bulldozers for additional construction were already at work, it had become clear the twenty-seven houses of the Ranch School were insufficient for the scale of the project ahead. Similarly, twenty families who owned their original homesteaded land that the United States government had granted to them were now displaced by the same government that was now taking their property through eminent domain.[32]

In this moment, the local history became global, thanks to the world-wide impact of what ensued atop the Pajarito Plateau. Thus, soon after the war, local residents who became interested in historic preservation recognized the histories' many layers and

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[31] Los Alamos Scientific Laboratory, *Los Alamos: Beginning of an Era, 1943-1945* (Los Alamos: Los Alamos Historical Society, 2008), 13; Los Alamos Historical Society, *History of the Los Alamos Ranch School*, accessed via http://www.losalamoshistory.org/school.htm on 4 January 2013.

[32] Los Alamos Scientific Laboratory, *Los Alamos: Beginning of an Era, 1943-1945* (Los Alamos: Los Alamos Historical Society, 2008), 14-15; Los Alamos Historical Society, Los Alamos County, and Fuller Lodge/Historic Districts Advisory Board, *Los Alamos Homestead Tour*, brochure, 2012.

interconnectedness in their early efforts. In 1966, the Atomic Energy Commission, the federal agency that managed nuclear energy, considered demolishing the Fuller Lodge, which had recently ended its conversion to use as a hotel. Some local citizens became concerned about the Fuller Lodge, a former Ranch School building that served as a cafeteria during the Manhattan Project and was designed by John Gaw Meem, one of the more prolific and influential architects of the twentieth century. The Commission appointed a committee that gathered opinions from Los Alamos; the consensus was to maintain the Fuller Lodge as a community landmark, to which the Los Alamos Office Manager of the Commission agreed. Most people hoped to see it operate as a cultural center or museum, including perhaps a historical society.[33]

With the approaching silver anniversary of the laboratory in 1967, the local chapter of the American Association of University Women created an organizing committee to explore the possibility of establishing a local historical society. The group turned to the president of the Historical Society of New Mexico for advice about such an undertaking. He also encouraged his audience by appealing to a sense of obligation, as he understood the global significance of the local history: "We would be remiss in our duties as citizens were we to take no action in preserving this history now before it becomes lost in the corridors of time." In the summer of 1967, local residents gathered on the patio of the Fuller Lodge to exchange stories that were up to a quarter-century old and to discuss the business of forming this incipient organization. They adopted by-laws and appointed

[33] Mary C. Byers, "In the Beginning," *History of the Los Alamos Historical Society and Museum, 1968-1988* (Los Alamos: Los Alamos Historical Society, May 1988), 1.

officers to produce a charter. By September, the Los Alamos Historical Society held its charter meeting in the Fuller Lodge.[34]

The Los Alamos Historical Society's first major project was to establish a museum as a tangible core to the organization. While Fuller Lodge and other Ranch School buildings were themselves historic, the group still desired a space in which to display artifacts to the public. The former infirmary and later Guest Cottage, built in 1918, was the oldest extant building of the Ranch School, and it was located next to the Fuller Lodge. Its history extended into the Manhattan Project, too, as many scientists had stayed there, and General Leslie R. Groves, the military director of the Manhattan Project, had stayed in it. By 1968, the Los Alamos Historical Society gained use of the Guest Cottage as a museum. Volunteers focused on many projects, including conducting interviews as well as gathering material, such as the locally relevant papers of John Gaw Meem, the architect of the Fuller Lodge, which soon became a National Historic Landmark. Meem provided the documents for the members of the Los Alamos Historical society to duplicate, and a formal effort began to create archives. In the summer, the museum opened, with a "gratifying" crowd and a schedule to be open for parts of four days a week with a volunteer workforce. By 1971, the museum hired a full-time employee.[35]

Early in the development of the Los Alamos Historical Society, the Manhattan Project did not dominate the area's earlier history as one might expect so soon after the Second World War. During the mid-1970s, the organization published the first of what

[34] Mary C. Byers, "In the Beginning," *History of the Los Alamos Historical Society and Museum, 1968-1988* (Los Alamos: Los Alamos Historical Society, May 1988), 1.
[35] Mary C. Byers, "In the Beginning," *History of the Los Alamos Historical Society and Museum, 1968-1988* (Los Alamos: Los Alamos Historical Society, May 1988), 1-4.

would become dozens of books for decades to come; the book was the result of a reunion of graduates from the Ranch School. It was not until more than a decade into its existence that the Los Alamos Historical Society attempted to increase the emphasis on the war years. During the early 1980s, the museum acquired and installed the historic doorway to 109 East Palace Avenue that was originally located in Santa Fe and had served as the arrival point for those who came to New Mexico to join the Manhattan Project. Nonetheless, the Historical Society did not drift into becoming one dimensional in its interpretation of the local history. For example, during the mid-1980s, it conducted a bus tour to Santa Fe for historic architecture, and it also created a scholarship awardable to a local high school student who wrote a research paper about the early years of Los Alamos. During this time, the Historical Society initiated a focus on the local history of homesteading, such as restoring the Romero Cabin built in 1913. As the president of the organization at the time explained, "Everyone stays away from the Manhattan Project because that's the lab. So they focus on the Ranch School because it was here when the lab came, and then they drift back to the aboriginal Indians and forget that the homesteaders were here. The Spanish Americans from the Valley homesteaded here and used the land at least seasonally for their sheep and cattle. The ranchers and homestead habitations were part of the reason that rich Chicago sportsmen established the Pajarito Club. That led to the Ranch School and Oppenheimer's knowledge of the area… I was interested in the totality of the experience here."[36]

Programming and professionalizing increased as the Historical Society's historic resources and historical focuses multiplied. Docents started an outreach program with

[36] Lore Watt, "The Society Continues," *History of the Los Alamos Historical Society and Museum, 1968-1988* (Los Alamos: Los Alamos Historical Society, May 1988), 7, 9-13.

history lectures in schools and the New Mexico Humanities Council funded traveling exhibits. People from three states came to the museum to attend a workshop co-sponsored by the Smithsonian Institution and the New Mexico Association of Museums provided professional development in community and school relations through museum outreach. And the American Association for State and Local History became involved in advising about archival preservation and collections management. The 1980s proved to be a major period of growth and diversification in the history of the central historic preservation organization in the community. Today, the Los Alamos Historical Society is in a similar process, with increased professional staff, museum hours, variety of programming, archival capacity, award-winning publication, community engagement, focus on organizational development, and international attention.[37]

[37] Lore Watt, "The Society Continues," *History of the Los Alamos Historical Society and Museum, 1968-1988* (Los Alamos: Los Alamos Historical Society, May 1988), 11-13.

CHAPTER 4

REMEMBERING NUCLEAR HISTORY

With over a decade of effort to create Manhattan Project National Historical Park having reached the U.S. Congressional level, the United States may soon add to its cherished few National Park Service units a new park that would span over three states across the country with the theme surrounding the Manhattan Project – the historic event that led to the use of the first nuclear weapon in the history of the world. In Los Alamos, location of the chief laboratory facility of the Manhattan Project, the narrative of this memory has emphasized local experiences in interpretation, scope, and audience – as demonstrated in the prior chapter. However, this new type of historic site and museum would present a heritage both local and international. With the introduction of the national park proposal, larger questions arise when remembering and interpreting a broader story to wider audiences, as the story becomes one of multi-national exchange. Yet, adding a global lens did not shift public attention away from the local construction of heritage; it intensified the contested effort to craft the local and regional history that would be projected to the world.

The Santa Fe New Mexican, the oldest daily newspaper west of the Mississippi River, was the forum in which local voices exchanged interpretations about the meaning of the potential park focused on the creation of the world's first nuclear weapons. U.S. Senator Jeff Bingaman, representing New Mexico, championed the bill to establish the national park before he left office after three decades, because he described the

Manhattan Project as "one of the most important events in our nation's history." Nevertheless, the newspaper based in New Mexico's capital city published an editorial that opposed the establishment of "a national park in honor of the atomic bomb" due to the destructive legacy of nuclear weapons. "Historic preservation is a Northern New Mexican hallmark, and Santa Fe's reputation in carrying it out has lots to do with our community's popularity as a place to visit," the *New Mexican* acknowledged, and "given our 400-year history, there has been plenty to preserve and commemorate; scenes grand and humble, public and private, civilian and military." Moreover, the periodical recognized, "There's no denying the importance of the Manhattan Project – and if it saved so much as one American life among the many that surely would have been lost if we'd invaded the Japanese mainland in 1945, we applaud its original goal." However, New Mexico's tradition of historic preservation and the importance of the Manhattan Project did not persuade the newspaper's editorial board to support the establishment of the national park, because "it brought instant death and long-term suffering to tens of thousands of Japanese civilians. And it opened a Pandora's box of evil in the wrong hands, where some soon landed – or maybe even in the right ones; nearly seven decades of global undiplomacy, and conventional wars touted as better than nuclear ones, are only part of the project's horrific legacy." Pointing to "anti-nuke activists around here" and to "opponents to development of nuclear anything, especially bombs," the *New Mexican* predicted a "vast public relations challenge facing the national park proposal."[38]

The newspaper contended that the park was unnecessary. First, while indeed Gettysburg, Pearl Harbor, and Ford's Theater were incorporated into the National Park

[38] The New Mexican, "Manhattan Project Park Should Be Shelved," *The Santa Fe New Mexican*, 24 July 2011.

Service system, "folks interested in the Manhattan Project already may visit the excellent Bradbury Museum," located in Los Alamos and run by the Los Alamos National Laboratory. Second, with a weak economy and a federal government that had "warred and tax-cut its way to the brink of financial disaster, if not further," there was "no money" for a new project, especially when many national parks were "down-at-the-heels." Instead of spending scarce money on a new national park that seemed redundant with the Bradbury Science Museum, the periodical advocated for such money to be spent on maintaining the parks already in the system.[39]

As the former director of New Mexico State Parks and the former Southwest Regional Director of the National Parks Conservation Association, David Simon wrote a published rebuttal to the editorial that described the *New Mexican*'s position as "the wrong, short-term view" even as it gave credit to the newspaper as a "proven, steadfast defender of national parks and the environment." While the Manhattan Project National Historical Park "involves difficult and painful subjects," Simon argued, "the park is absolutely necessary." Himself a resident of New Mexico, Simon maintained, "America needs the National Park System to tell the full story of our history and heritage; it's also part of living our First Amendment principles, which value honest and open public dialogue about our nation." By protecting "key remaining places" and interpreting "irreplaceable historical resources," Simon believed that the "history objectively taught" would allow visiting audiences to "apply their own value systems and form their own opinions." The National Park Service was the right steward, because of its many units remembering controversial topics, such as the Civil War, slavery, the civil rights movement, treatment of American Indians, and Japanese internment. Specifically in the

[39] Ibid.

Second World War, "far more American lives were saved in World War II due to the Manhattan Project than were tragically lost in the battles" commemorated by World War II Valor in the Pacific National Monument, War in the Pacific National Historical Park, and the Aleutian World War Two National Historic Area.[40]

Simon demonstrated that establishing this new park in such a context was critical. With the Manhattan Project recognized as "one of the most important events in world history," he observed that the United States "can't afford to not establish this park," as it would risk the park system having "a gaping hole in its representation of some of the most significant U.S. historical themes." Pointing out that many state and national parks had been established during the Great Depression, Simon remained confident that funds could be appropriated from the "massive budgets" of the Departments of Energy and Defense, especially as the National Park Service approached its centennial in 2016.[*] "If done properly," Simon reasoned, "a Manhattan Project National Historical Park will take its place among the best National Park sites that commemorate epic national and world-changing events, present history objectively, and make us think – insisting that we inquire about ourselves as a country and as human beings." New Mexico had played a "key role" in an event that "changed the course of world history," and it was possible to "honor this history, while still debating the subjects that surround the bomb." In fact, "one can lament Truman's use of nuclear weapons, favor nuclear disarmament, and oppose nuclear energy yet still see the need for a Manhattan Project NPS unit." In short,

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[40] Dave Simon, "Manhattan Project National Park Is Controversial, but Necessary," *The Santa Fe New Mexican*, 30 July 2011.

[*] Supporters later argued that preserving and managing the sites of the proposed Manhattan Project National Historical Park was far less expensive than demolition; five years of NPS stewardship would cost $21 million, but proper demolition would cost $200 million, see William J. Broad, "Bid to Preserve Manhattan Project Sites in a Park Stirs Debate," *The New York Times*, 3 December 2012.

the proposed park would not glorify nuclear weapons, but instead it would present an influential history and allow opportunities for more informed discussion about issues today that originate from this history.[41]

The contest over local heritage had implications about national remembrance and even perhaps notions of nationalism. With support in the United States by Congress and by the Presidential Administration, the Manhattan Project National Historical Park's potential meanings caught the attention of officials in Japan. In letters written to the United States, representatives of the cities of Hiroshima and Nagasaki requested that the potential park consider providing information about the damage caused by the bombings that resulted from the Manhattan Project. Hiroshima Mayor Kazumi Matsui indicated that "the people of Hiroshima were profoundly alarmed" by the proposal, and planning a park about a project that led to such destructive weapons was not in line with "the wishes of the millions of people around the world calling for the abolition of nuclear weapons… Such a park would communicate an erroneous and dangerous message to future generations." Consideration of current political aims affected the conceptualization and the interpretations of the Manhattan Project National Historical Park even before it existed. Nagasaki Mayor Tomihisa Taue went further and urged the U.S. to take steps toward the promise made by Barack Obama in 2009 to seek a world without nuclear weapons.[42]

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[41] Dave Simon, "Manhattan Project National Park Is Controversial, but Necessary," *The Santa Fe New Mexican*, 30 July 2011.
[42] "Hiroshima, Nagasaki Concerned Manhattan," *House of Japan*, 3 December 2011, http://www.houseofjapan.com/local/hiroshima-nagasaki-concenrned-manhattan . David Barna, "Mainichi Daily News (Tokyo): Hiroshima, Nagasaki Express Concern about Manhattan Project Plan," http://webmail.itc.nps.gov/pipermail/infozone/2011-December/001727.html .

The various visions of the Manhattan Project National Historical Park triggered an exchange between nations, as it became an issue of diplomacy when Japanese leaders highlighted issues of historical memory and contemporary politics. Hence, it forced the United States to respond by clarifying the intent of the new national park. John Roos, the U.S. Ambassador to Japan, explained to the mayors of Hiroshima and Nagasaki that the national park would commemorate the activities during the war in a manner "reflective, rather than celebratory." He anticipated it as an "educational and commemorative facility." Roos addressed the call for Obama' to fulfill his promise in nuclear policy, too, linking the present to the past as Matsui had done. He claimed, "As we look to the future and a world without nuclear weapons, it is fitting to remember that era through the lens of history, which the proposed park aims to achieve." Echoing a similar reasoning, Cindy Kelly, president of the Atomic Heritage Foundation, maintained, "A national park site would deepen public understanding of the development of the atom bomb in the context of the time, including how its creators felt about it from a moral and personal perspective. It also will provide insight into an undertaking that transformed American science, politics, economics, society and culture and left an indelible legacy for the world today."[43]

The Atomic Heritage Foundation, an organization based in the U.S. capital and dedicated to preserving and interpreting the Manhattan Project and the Atomic Age, understood what became an international concern. It reported on the explanation the U.S. Ambassador had provided, and it stated, "The Park will serve as an educational tool and

[43] "US Tells Hiroshima Manhattan Project Park Plan Not Celebratory," *House of Japan*, 25 January 2012, http://www.houseofjapan.com/local/us-tells-hiroshima-manhattan-project-park-plan-not-celebratory ; "Roos Says A-Bomb Park Reflective, Not Celebratory," *The Japan Times*, 25 January 2012; Julian Ryall, "US Forced to Defend Manhattan Project Park to Japan," *The Telegraph*, 25 January 2012.

will consider the history of nuclear weapons from every angle." Consequently, the park would not be a site of celebration but rather one of education, provocation, and discussion – perhaps even debate. "With its long-standing oversight of controversial landmarks," such as Manzanar National Historic Site and Little Bighorn Battlefield, "the NPS is well practiced in telling the story of sites with divisive histories." The organization emphasized that the Department of Interior and the Department of Energy, both involved with the proposed park, "stand firmly behind" it. The Director of the National Park Service, Jonathan Jarvis, had already affirmed months earlier, "The National Park Service will be proud to interpret these Manhattan Project sites and unlock their stories in the years ahead." Secretary of Interior Ken Salazar had also proclaimed support by stating, "The secret development of the atomic bomb in multiple locations across the United States is an important story and one of the most transformative events in our nation's history. The Manhattan Project ushered in the atomic age, changed the role of the United States in the world community, and set the stage for the Cold War." Accordingly, the Atomic Heritage Foundation expressed its trust, "Given the NPS's established experience with interpreting historical landmarks, the Atomic Heritage Foundation is confident the Park will do an excellent job informing the public about the history of the Manhattan Project and the Atomic Age for many generations to come."[44]

Foreseeing preservation of these sites for future generations was at the heart of the effort – and opposition – to create the Manhattan Project National Historical Park, which would then lead to much edification, both historical and contemporary. "Too often in this country, where we tend to look forward rather than back, by the time we decide a site is

[44] "U.S. Ambassador to Japan Defends MP National Historical Park," Atomic Heritage Foundation, 25 January 2012, http://www.atomicheritage.org/index.php/ahf-updates-mainmenu-153/628-us-ambassador-to-japan-defends-manhattan-project-national-historical-park.html .

historic enough to make it worth preserving, a shopping mall has taken its place," remarked an opinion published in *Newsday*, a newspaper serving the New York City area. The bill must "pass soon, before time does what the developers haven't." While the article acknowledged the arguments that would surround "the propriety of preserving the crucible for the creation of man's greatest weapon of mass destruction," it maintained, "There is nothing to be gained by trying to erase, rewrite or sugarcoat history – not if we are going to learn from it." This rationale was why the National Trust for Historic Preservation had taken up the cause for garnering support for the bill establishing the Manhattan Project National Historical Park. After emphasizing that "the creation and use of the atomic bomb, developed by the Project's scientists, brought an end to World War II, altering the position of the United States in the world community while setting the stage for the Cold War," the organization urged its constituents and other audiences to contact federal legislators to ask them to support the bill: "The Manhattan Project is part of the National Trust's portfolio of National Treasures, and we are leading efforts to ensure this legislation is enacted. But we need your help to make it happen!"[45]

The public attention and exposure of the proposed Manhattan Project National Historical Park continued to intensify and increase during the summer, as the legislation appeared ready to be brought to the floor of the House of Representatives. CBS highlighted it on national television on the 67th anniversary of the bombing of Hiroshima. In the program, Ellen McGehee, historic buildings manager of the Los Alamos National Laboratory, emphasized the importance of preservation: "You really

[45] Dale McFeatters, "McFeatters: Turn Manhattan Project Sites into National Parks," *Newsday*, 3 August 2012; Amy Cole, "The Manhattan Project: 20th Century History, 21st Century Significance," *PreservationNation Blog*, National Trust for Historic Preservation, 19 July 2012, http://blog.preservationnation.org/2012/07/19/the-manhattan-project-20th-century-history-21st-century-significance/#.UP5dzq6Oivg .

can't understand how the scientists were working and what conditions they were working under unless you come out to the place where history really happened." Susan Gordon, representing the Alliance for Nuclear Accountability, expressed a reaction "of caution." According to the CBS reporter, "While she agrees what scientists accomplished here is worthy of a national park, she worries commemorating the bomb may celebrate it, too, glossing over the problem of nuclear waste." On camera, Gordon contended, "It needs to be a much more balanced approach that addresses the environmental and health consequences of the production of nuclear weapons in this country." McGehee, when directed by the reporter to the "sobering effect of what was being built and designed," responded, "History isn't always pretty, and I think it's important that we don't lose this history, or lose the ability to reflect on that history."[46] For both perspectives presented about the potential national park, historic preservation was a means for history, legacy, and current-day reflection.

After much public coverage and debate at local, national, and international levels, a congressional vote on the legislation that would create the Manhattan Project National Historical Park became imminent during the late summer of 2012. In August, *The Washington Post* took an unusually rare action by publishing an editorial about a specific piece of legislation on a subject other than major national policies like Social Security or health care. "A bipartisan initiative seeks" to add this new unit to the National Park Service, the newspaper stated, and it endorsed this proposed park: "That's a fine idea." The editorial contended, "Such a move would expand access to these crucial historical sites as well as provide funding and staffing to preserve them. Given their importance in

[46] "Atomic Bomb Labs May Be Made a National Park," *CBS This Morning*, aired 6 August 2012, and available at http://www.cbsnews.com/video/watch/?id=7417292n .

the history of the United States, the Cold War and the 20th century, Congress should pass the park designation bill by Sen. Jeff Bingaman (D-N.M.) and companion legislation by Rep. Doc Hastings (R-Wash.)." The Manhattan Project "ranks among the most significant chapters of the American Century," and it created "a weapon that changed the course of warfare forever." *The Washington Post* did recognize the challenge of interpreting such a site: "It will be a daunting task. The bill acknowledges that the project's legacy is 'significant, far-reaching and complex.' The Manhattan Project harnessed American scientific, engineering and industrial prowess in an effort that many saw as essential to the survival of the free world in its fight against fascism. But many of its participants wrestled within themselves then and afterward over their part in creating such a frightful tool of death." The editorial articulately framed larger historical questions with the challenge of modern presentation, "The decision to use the weapon, to destroy the Japanese cities of Hiroshima and Nagasaki, remains, and will always remain a question of keen historical debate. The explosions brought to a swift end a war that might otherwise have dragged on for a long time, at a cost of hundreds of thousands more lives, both American and Japanese. But they killed hundreds of thousands of Japanese civilians, both in August 1945 and subsequently from radiation poisoning. A successful exhibit will present the choice that President Harry S. Truman faced in all its complexity without seeking to decide the issues for visitors." With a challenge of interpreting not unlike that of Little Rock Central High School and the Manzanar site, the National Park Service has developed the "significant experience" needed to handle "fraught histories," according to the newspaper, and as a "seminal moment in world history," the Manhattan Project "surely warrants the wider audience this legislative push would bring."[47]

[47] Editorial Board, "Commemorating the Bomb," *The Washington Post*, 12 August 2012.

The next month, the bill to establish Manhattan Project National Historical Park failed in the House of Representatives on 20 September 2012. "Rarely does a proposed new national park run into this kind of opposition," the report published in the *Albuquerque Journal* read, "but this one deals with the A-bomb." Representative Dennis Kucinich, Democrat from Ohio, voiced the loudest opposition to the bill, as he disapproved of opportunities to "celebrate ingenuity that was used to put all humanity at risk." He placed his stance within the context of current political challenges: "At a time when we should be organizing the world toward abolishing nuclear weapons before they abolish us, we are instead indulging in admiration at our cleverness as a species." As he viewed the potential implication of the proposed national park, "The bomb is about graveyards; it's not about national parks." The newspaper report also featured the voice of the Atomic Heritage Foundation, which stated that the National Park Service would interpret the Manhattan Project "in all its complexity, giving voice to all sides of this contested history. It is important that we remember and reflect upon the past." Clearly, the legacy of nuclear weapons dominated the debate over the new national park, whether it was in a local forum a year earlier, national news outlets, international diplomatic exchanges, or on the floor of U.S. Congress. So pervasive was this legacy in envisioning the park that even its proponents of did not remove these themes from the potential park but instead argued that the park allowed an opportunity to remember these impacts, highlight these legacies, and represent these viewpoints – among others.[48]

[48] Richard Simon, "A-Bomb Park Bill Fails in House," *Albuquerque Journal*, 22 September 2012; Richard Simon, "House Rejects Manhattan Project Park Bill," *Journal North*, 21 September 2012; Richard Simon, "U.S. House Effort to Recognize the Atomic Bomb with New National Park Is a Dud," *The Dallas Morning News*, 20 September 2012; Richard Simon, "House Effort to Recognize the A-Bomb Is a Dud," *Los Angeles Times*, 20 September 2012.

Still, the Manhattan Project National Historical Park won a majority of the vote in the House of Representatives, yet it failed to pass. The bill had come up during a "suspension of the rules," which is designed for non-controversial legislation and hence requires only forty minutes of debate. However, because this bill turned out more controversial than expected, the vote of 237-180 (about 55% to 42%) was not enough to pass, as a "suspension of the rules" requires a two-thirds majority to pass. Representative Doc Hastings, Republican from Washington, sponsored the Manhattan Project National Historical Park Act (HR 5987), but 112 members of his own party voted against it, as did 68 Democrats. As a result, Representative Kucinich claimed to have led "a bipartisan coalition of 180 Members of Congress to stand for veterans, for fiscal responsibility [due to a lack of funds to maintain even existing parks,] and friendship with the Japanese people."[49]

United for Peace and Justice, an organization promoting justice and peace in movements local and global, applauded Representative Kucinich's seemingly noble stand, driven by what the organization deemed an "inspiring testimony." As the organization's website reported, he "led a successful bipartisan effort to defeat a bill in Congress that would have established a new national park celebrating the technological achievements of the Manhattan Project." The article quoted Kucinich, as he linked the commemoration of the technology with the impacts and legacies that technology created: "The technology which created the bomb cannot be separated from the horror the bomb created… If there was going to be a new park, it should serve as a solemn monument to Japanese American friendship that rose from the ashes and the worldwide work for

[49] Randi Minetor, "Manhattan Project Park Bill Achieves Majority, but Fails in the House," *Examiner*, 21 September 2012.

nuclear disarmament that continues to this day, rather than a celebration of a technology that has brought such destruction to the world. Failure to recognize this dimension, even in its first iteration, really is a significant injustice." This was a considerable victory, as interpreted by United for Peace and Justice, because the legislation had the support of the Obama Administration and the Energy Communities Alliance. As Representative Kucinich explained, "The 'Bomb Park' is a mistake. We should not spend another $21,000,000 more to 'spike the nuclear football.' We are defined by what we celebrate. We should not celebrate nuclear bombs." Unlike the conception by National Park Service of its own units, Representative Kucinich understood the park, and perhaps national parks in general, as triumphant rather than remembrance, congratulatory rather than educational, monumental rather than preservationist.[50]

However, not all left-leaning media sources supported Kucinich's view. For example, the Huffington Post responded with a case for supporting the bill by Jim DiPeso, Policy Director of ConservAmerica, an organization "founded in 1995 to resurrect the GOP's great conservation tradition and to restore natural resource conservation and sound environmental protection as fundamental elements of the Republican Party's vision for America." DiPeso characterized Kucinich's position as "ideological posturing run amok," because "national historical parks are opportunities for education. Kucinich's statement insulted the dedicated professionals in the National Park Service who responsibly interpret the events that shaped out country's history." The author's faith in the reputation and skill of the National Park Service was key to his

[50] Jackie Cabasso, "UFPJ Applauds Dennis Kucinich for Leading Defeat of Bill in U.S. House of Representatives to Establish Manhattan Project National Park," United for Peace and Justice, 16 October 2012, http://www.unitedforpeace.org/2012/10/16/ufpj-applauds-dennis-kucinich-for-leading-defeat-of-bill-in-u-s-house-of-representatives-to-establish-manhattan-project-national-park .

argument, as it was for others who voiced support for the national park during the preceding fourteen months. "The historical significance of the Manhattan Project is beyond question," DiPeso observed, "and that is the essence of why Congress should authorize a national historical park to commemorate and interpret the project." His piece in the *Huffington Post* was clear in its claims, "Kucinich's personal views on the development and use of the atomic bomb are irrelevant to the project's importance to American history." The influence of the Manhattan Project went well beyond the United States as "a crash program" that shaped the outcome of "a global conflict in which the future of Western civilization hung in the balance." Consequently, in interpreting the Manhattan Project, its impacts, and its legacy, "the Park Service would be responsible for shedding light on this and the many other military, technological, geopolitical, and ethical dimensions of the Manhattan Project, even if the story tells people things they would rather not hear." Provocation was an important asset of this proposed park.[51]

Provoking people to think critically, however, did not mean that the National Park Service would take a side on the many issues tied to the Manhattan Project. The agency, DiPeso emphasized, is not "in the propaganda business, as Kucinich seems to believe." The National Park Service "has capably interpreted many of the difficult and tragic episodes in America's history that are commemorated at national parks and historical sites," such as slavery, racial segregation, the Trail of Tears, and Japanese internment. These sites dedicated to such difficult pasts provided opportunities for "modern Americans [to] come to grips with our history and reflect on the meaning of events that

[51] Jim DiPeso, "Pass the Bill Establishing Manhattan Project National Historical Park," *The Huffington Post*, 26 September 2012, http://www.huffingtonpost.com/jim-dipeso/manhattan-project-national-historical-park_b_1917059.html ; ConservAmerica homepage, http://conservamerica.org , accessed 14 January 2013.

tell our country's story." While Kucinich's "perspective is worth hearing," DiPeso pointed out that it was "not the only voice that should be heard." He expressed his disapproval of politicians using history as an chance to attract political attention: "That's why we don't let congressmen handle historical interpretation in our national parks, a job they surely would corrupt with ideological posturing and bumper sticker politicking." In fact, politicians were an obstacle to understanding history, "Imagine the damage our national park system would suffer if we allowed ideologues to interfere with responsible interpretation of our history in order to conform to this or that notion of political correctness." Therefore, "Congress should pass the park authorizing legislation, then get out of the way and let the National Park Service do the interpretation job it does so well," DiPeso powerfully concluded in *The Huffington Post*.[52]

Based in Oak Ridge, Tennessee, location of one of the three proposed sites of the Manhattan Project National Historical Park, *The Oak Ridger* agreed with DiPeso's views. The newspaper published two prominent opinions that supported the park. Bill Wilcox, the Oak Ridge city historian, delivered a speech that had four main reasons for commemorating the Manhattan Project, according to the article's author, D. Ray Smith. First, Smith wrote, Wilcox clarified that "we are NOT celebrating the bombing of Hiroshima and Nagasaki," but rather the end of "this war that brought 54 million deaths." Second, stopping the war ceased the plans of a major invasion of Japan that "anticipated to bring an appalling 250,000 deaths of our men and millions of Japanese deaths." Third, the Manhattan Project ushered in the Nuclear Age, when the "tremendous energy of the atom was, for the first time, released and controlled." Finally, nuclear science and

[52] Jim DiPeso, "Pass the Bill Establishing Manhattan Project National Historical Park," *The Huffington Post*, 26 September 2012, http://www.huffingtonpost.com/jim-dipeso/manhattan-project-national-historical-park_b_1917059.html .

technology led to "highly beneficial applications," including nuclear medicine, commercial nuclear power, and applications in industry and agriculture that "improved the quality of life to mankind all over the world." Smith believed Wilcox had presented what would become "a classic in historic preservation literature," which concluded by highlighting that "the beginning of the end of war – is remembrance," and hence, "we do not remember our wartime roles in order to glorify that or any war, but to remember how terrible war really is and hopefully do something more to bring the world lasting peace." Therefore, even arguments favorable to the park were didactic, as they tried to address the moral high ground claimed by the opposition.[53]

In the same vein, Smith included an entire letter written to Representative Kucinich by Martin Skinner, who had worked for many years in physics, separating many stable isotopes that had such an impact on people's daily lives. As Skinner reasoned, "While the death toll was large as expected, it was nowhere equal to the loss if we had invaded Japan. Just look at how the Japanese defended the islands to almost the last man. The combined losses of Japan and the U.S. would have been tremendous. The men on ships in the Pacific headed for the invasion were told they likely would not return. Ask any of those men – some are still alive – how they felt when peace was declared!" Kucinich was mistaken, Skinner maintained, as the park would be "much more than the celebration of the bomb technology," as "what is to be celebrated is the ingenuity of scientists and engineers who have developed technologies that continue to benefit hundreds and thousands of people all over the world every day of the year." For example, "nuclear medicine is an outgrowth of the Manhattan Project, as is nuclear propulsion for space

[53] D. Ray Smith, "Historically Speaking: Putting the Manhattan Project into Proper Perspective," *The Oak Ridger*, 8 October 2012.

exploration." Skinner also mentioned that there were many sources for "information on the peaceful utilization of many aspects of nuclear technology."[54]

At the end of 2012, public attention on the Manhattan Project National Historical Park was revived with a renewed effort to establish the park by including it in the final wave of legislation by the 112th Congress. *The New York Times* captured the essence of the continuing disagreement about the potential park interpreting the creation of the world's first nuclear bombs: "Critics have faulted the plan as celebrating a weapon of mass destruction, and have argued that the government should avoid that kind of advocacy. Historians and federal agencies reply that preservation does not imply moral endorsement, and that the remains of so monumental a project should be saved as a way to encourage comprehension and public discussion." When the Manhattan Project National Historical Park Act had failed in September 2012, Representative Doc Hastings, the sponsor of the bill in the House of Representatives, had not given up hope, as he stated, "While it didn't receive the supermajority needed to be sent to the Senate today, a big bipartisan majority of the House voted to establish the Manhattan Project National Historical Park. We've show there is support for this park and will be working towards the goal of enacting this into law before the end of this year." As the Chairman of the House Natural Resources Committee, he tried to make this a reality as the year came to a close.[55]

In this political moment, *The Boston Globe* declared, "The House shouldn't make the same mistake twice." As the second push for the park seemed to be underway, the

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[54] D. Ray Smith, "Historically Speaking: Putting the Manhattan Project into Proper Perspective," *The Oak Ridger*, 8 October 2012.

[55] William J. Broad, "Bid to Preserve Manhattan Project Sites in a Park Stirs Debate," *The New York Times*, 3 December 2012; Richard Simon, "U.S. House Effort to Recognize the Atomic Bomb with New National Park Is a Dud," *The Dallas Morning News*, 20 September 2012.

newspaper published an editorial in support of the effort. The article acknowledged, "The Manhattan Project that created the first atomic bomb was a great success – and, in the eyes of many, a cautionary tale about the dangers of technological proliferation." However, the editorial understood that "the best way to forget such complicated lessons of the past is to pretend they never happened," something those in the House of Representatives who voted against the Manhattan Project National Historical Park Act "ought not to forget." The argument by Representative Kucinich was "shortsighted," *The Boston Globe* argued, because "many advances in science and technology have deadly uses as well as peaceful ones, and sometimes the deadly ones help keep the peace." The newspaper brought up the oft-invoked point about the historical park's usefulness as a starting point for discussion about contemporary politics and ethics: "The questions that could be raised at the proposed Manhattan Project National Park are exactly the ethical quandaries that contemporary students – and lawmakers – should be confronting." To illustrate this point further, *The Boston Globe* pointed to an interview of Heather McClenahan, Executive Director of the Los Alamos Historical Society, which aired on National Public Radio earlier in the week. McClenahan articulated some of these issues: "Why did we do this? What were the good things that happened? What were the bad? How do we learn lessons from the past? How do we not ever have to use an atomic bomb in warfare again?" Indeed, this historical site would have a tremendous relevancy for teaching leaders and citizens today.[56]

[56] Editorial Board, "Manhattan Project National Park Would Commemorate History, Not Glorify It," *The Boston Globe*, 7 December 2012; Ted Robbins, "Manhattan Project Sites Part of Proposed Park," National Public Radio, 4 December 2012, transcript, http://www.npr.org/templates/transcript/transcript.php?storyId=166402093 .

Thanks to the politics and ethics of nuclear weapons, the memory of the impact of the atomic bomb on the Second World War continues to be contested, even outside of the debate surrounding the Manhattan Project National Historical Park. "Two foundational beliefs have colored our views of nuclear weapons since the end of World War 2," Ashutosh Jogalekar, a chemist with interest in the history of science, wrote in the *Scientific American*: "One, that they were essential to or at least very significant for ending the war, and two, that they have been and will continue to be linchpins of deterrence." However, he pointed to a new book, *Five Myths about Nuclear Weapons*, which "demolish[es] these and other myths about nukes." According to Jogalekar's account of the book, the myth of nuclear weapons being paramount to ending the war perpetuated by "post facto rationalization" constructs a narrative that "brilliant scientists worked on a fearsome weapon in a race against the Nazis, and when the Nazis were defeated, handed it over to world leaders who used it to bring a swift end to a most horrible conflict. Psychologically it fits into a satisfying and noble narrative." Yet, it doesn't take "'revisionist' history," as Jogalekar saw it, to realize that declassified files in American, Soviet, Japanese, and British archives allow "us to piece together the cold facts and reveal what exactly was the impact of the atomic bombings of Japan on the Japanese decision to end the war. They tell a story very different from the standard narrative." These documents, he contended, uncover that the atomic bombings caused only "mild consternation" among Japanese leaders, while the declaration of war and the invasion of Manchuria and the Sakhalin Islands by the Soviet Union had "a very significant impact" and caused "the same men" to become "extremely rattled."[57]

[57] Ashutosh Jogalekar, "On the Uselessness of Nuclear Weapons," *Scientific American*, 13 January 2013; Ward Wilson, *Five Myths About Nuclear Weapons* (New York: Houghton Mifflin

Jogalekar also addressed the second most popular "myth" of the five major "myths" covered in the book. As he recounted it, "Conventional thinking continues to hold that the Cold War stayed cold because of nuclear weapons." While this was "true to some extent," he admitted, "what it fails to recognize is how many times the war threatened to turn hot." For example, the Cuban Missile Crisis represented one of the "near-hits that could have easily led to nuclear war," as we learned more about these events with increasing research through the growing number of declassified documents. During the Cuban Missile Crisis, for instance, Kennedy chose to impose a blockade on Cuba, despite the fact that Soviets "had made it clear that any action against Cuba would provoke war," and "so deterrence does not seemed to have worked" in this case. Moreover, the argument for deterrence overlooks "normal accidents," Jogalekar mentioned, due to "miscalculation, misunderstandings or paranoia. The fact is that these weapons of mass destruction have a life of their own; they are beyond the abilities of human beings to completely harness because human weaknesses and flaws also have lives of their own." These considerations helped Jogalekar believe that some of the purported positive effects of nuclear weapons were, in fact, rationalizations for their continued production and possession.[58]

Acknowledging what seemed like mythology would change the future, Jogalekar reasoned. "If we realize that the atomic bombing of Hiroshima and the general destruction of cities played little role in ending World War 2," he surmised, "almost everything that we think we know about the power of nuclear questions is called into question." Therefore, nuclear weapons have remained like "a giant T. rex; one could

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Harcourt, 2013).
[58] Ibid.

possibly imagine a use for such a creature in extreme situations, but by and large it serves as an unduly sensitive and enormously destructive creature whose powers are waiting to be unleashed on to the world." Consequently, Jogalekar reckoned, "Having the beast around is just not worth its supposed benefits anymore, especially when most of these benefits are only perceived and have been extrapolated from a sample size of one." In fact, he asserted, these were "outdated weapons," because "experts have pointed out since the 1980s that technology and computational capabilities have now improved to an extent that allows conventional precision weapons to do almost all the jobs that were once imagined for nuclear weapons; the U.S. especially now has enough conventional firepower to protect itself and to overpower almost any nuclear-armed state with massive retaliation." As a result, he stressed, "The fact is that nuclear weapons as an instrument of military policy are now almost completely outdated even from a technical standpoint." Unfortunately, as Jogalekar lamented, "We continue to nurture this creature," but still, "much progress has been made in reducing the nuclear arsenals of the two Cold War superpowers, but others have picked up the slack and continued to pursue the image and status – and not actual fighting capacity – they think nuclear weapons confer on them." Iran and its nuclear program, highlighted early in the opening chapter, could fit such a description – and it certainly has heavy consequences, both globally as well as domestically in the United States, particularly during the 2012 election cycle.[59]

With all of these ongoing public discourses, remembering nuclear history remains a challenge, as it is fraught with political and ethical implications, regardless of how it is interpreted even within a historical lens. Not surprisingly, the Manhattan Project National Historical Park both reflects these powerful feelings and also helps trigger them further.

[59] Ibid.

The stories of pain and triumph could simultaneously justify and invalidate the creation of a national park focused on the world's first nuclear weapons – the key is in the interpretation of the histories at these sites, and the view one takes of what opportunities they provide (i.e. celebration versus reflection). Either way, the modern implications cannot be escaped, as demonstrated by voices advocating and opposing the Manhattan Project National Historical Park. These contested narratives and powerful reactions themselves, regardless of the particular position, perhaps more than anything else, substantiate the relevance of this national park, as it would become a forum for grappling with the meanings of remembering the Manhattan Project, the influential histories of the sites, and its subsequent consequences and legacies that still today profoundly shape common rhetoric, foreign policy, and energy solutions. It is a past that still thrives in the present and decidedly helps mold the future – the Manhattan Project National Historical Park could bring all this together.

CHAPTER 5

INTERPRETING NUCLEAR HISTORY

Much of the debate surrounding the legitimacy of creating the Manhattan Project National Historical Park becomes reduced to an ethical question about whether or not using nuclear weapons on Japan was morally justified and strategically necessary to end the Second World War. This underlying question will never have a definitive answer, and thus, historians and the public alike will never reach a consensus. More importantly, possible answers to this question are distractions from the central concern in discussing the creation of the park: whether or not these Manhattan Project sites are worthy of preservation, and whether the National Park Service is the appropriate steward. The frame of conversation must move away from the counter-factual assumptions and assertions about the use (or avoidance) of the atomic bomb, and it must focus instead on the question of the significance of the history that unfolded.

One respectable and consistent measuring tool for historic significance is the National Register of Historic Places. William Murtagh, the first Keeper of the National Register of Historic Places, identified it "as the major vehicle to identify cultural resources." Of the Register's four major criteria for evaluation (event, person, design/construction, and information potential), the Manhattan Project meets all four. The globally transformative event is certainly, as Criterion A requires, "associated with events that have made a significant contribution to the broad patterns of our history." With the involvement of some of the top scientists in the world led by J. Robert Oppenheimer, the

Manhattan Project is also, as Criterion B prescribes, "associated with the lives of significant persons in or past." This team coming together for this event that led to the capstone development of the world's first nuclear bomb "represent the work of a master," as Criterion C dictates. Although the presence of active laboratory facilities on and near many of the historic sites associated with the Manhattan Project today prevents thorough archaeological investigation, these historic locations are still "likely to yield, information important in history," as Criterion D stipulates. Therefore, it is not surprising that some sites related to the Manhattan Project in Los Alamos were approved for National Historic Landmark status in 1965. The significance of the Manhattan Project has long been recognized, as even the degree and the content of the reaction against establishing the Manhattan Project National Historical Park suggests by condemning the tremendous impact of the Manhattan Project as its core argument for warding off commemoration through a national park.[60]

With the significance of the Manhattan Project unquestioned, it is important to then establish what role historic preservation plays by protecting such a painful yet triumphant history. The renowned geographer David Lowenthal points toward a nuanced understanding of the process of constructing historical memory: "Benign and baneful consequences are intertwined; heritage vice is inseparable from heritage virtue. Yet heritage is customarily either admired or reviled in toto. Devotees ignore or slight its threats; detractors simply damn its ills and deny its virtues." Art historians Robert Nelson

[60] William J. Murtagh, *Keeping Time: The History and Theory of Preservation in America* (New York: Sterling Publishing Co., 1988), 169; *How to Apply the National Register Criteria for Evaluation*, National Register Bulletin 15, National Park Service, Department of the Interior, accessed on 1 March 2013 via http://www.nps.gov/history/nr/publications/bulletins/nrb15/ ; *National Historic Landmarks Survey*, National Park Service, accessed on 1 March 2013 via http://www.nps.gov/nhl/designations/Lists/NM01.pdf .

and Margaret Olin contend for the same complexity: "Monuments enjoy multiple social roles," as they are "not merely cold, hard, and permanent," but are also "living, vital, immediate, and accessible." Nelson and Olin argue, "A monument can achieve a powerful symbolic agency… attacking a monument threatens a society's sense of itself and its past." The Manhattan Project National Historical Park is not simply about the past, but it is about the present just like any creation of heritage; as Nelson and Olin maintain, a "monument does not privilege the past at the expense of the present." Such an awareness of the present triggered by the Manhattan Project National Historical Park would include the viewpoints expressed by those who strongly disapprove of the legacy of nuclear weapons. As Nelson and Olin explain, "Monuments are important, because people want to see them, and when that quest is realized actually or virtually, monuments become social agents." Thoughtful and provocative interpretation at the Manhattan Project National Historical Park could uproot a visitor's simplistic understanding of all things nuclear; the experience of a monument, Nelson and Olin claim, "remakes the memories of individuals and connects both object and beholder to larger social structures." Therefore, obstructing the creation of this type of monument, according to Nelson and Olin, "constitutes a powerful and communal violation." Any attempt "to redirect cultural memory" would mean losing the contemporary educational opportunities about all perspectives on the historical impact of this transformative technology that remain possible only through site-specific learning – as Nelson and Olin highlight, "memory and monument are to each other as process and product."[61]

[61] David Lowenthal, "The Heritage Crusade and Its Contradictions," in Max Page and Randall Mason, eds., *Giving Preservation a History: Histories of Historic Preservation in the United States* (New York: Routledge, 2004), 21; Robert S. Nelson and Margaret Olin, "Introduction," in

The field of historic preservation in the postmodern world has extensively dealt with conflicted histories and thus has developed the tools for properly handling such complex stories. Jennifer McStotts, a scholar of historic preservation and urban studies, points out, "Modern preservation values are broadening to include sites with contested histories." She discerns that "this development represents the latest stage of the American preservation movement and an inclusion of values from reverence of history and historic sites to the desire for a contemplative, authentic experience." J. E. Tunbridge and G. J. Ashworth, who study heritage tourism, reason that because "history is created to serve contemporary functions," it follows that "the creation of a national heritage" becomes "a matter of policy." The establishment by the national government of a National Park Service unit dedicated to the key sites of the Manhattan Project, with its functions in the present drawn from the past, would fit just such a policy. As McStotts maintains, "Endurance of these landscapes is necessary for healing and for remembrance of the meaning and significance of the associated experience."[62]

Thus, the Manhattan Project National Historical Park could serve as precisely the poignant forum necessary to spark debate about the past and future policy rather than the hope that preventing its fruition will cleanse historical memory and provide definitive

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Robert S. Nelson and Margaret Olin, eds., *Monuments and Memory, Made and Unmade* (Chicago: University of Chicago Press, 2003), 3, 6, 5, 6, 3-4, 4.

[62] Jennifer McStotts, "Preserving Walls: Cultural Landscapes with Divisive Histories," Cari Goetcheus and Eric MacDonald, eds., *Exploring the Boundaries of Historic Landscape Preservation*, Proceedings of the Twenty-ninth Annual Meeting of the Alliance for Historic Landscape Preservation 2007 (Clemson: Clemson University Digital Press, 2008), 113, 114; J. E. Tunbridge and G. J. Ashworth, *Dissonant Heritage: The Management of the Past as a Resource in Conflict* (Chichester: John Wiley & Sons, 1996), 46; Jennifer McStotts, "Preserving Walls: Cultural Landscapes with Divisive Histories," Cari Goetcheus and Eric MacDonald, eds., *Exploring the Boundaries of Historic Landscape Preservation*, Proceedings of the Twenty-ninth Annual Meeting of the Alliance for Historic Landscape Preservation 2007 (Clemson: Clemson University Digital Press, 2008), 113.

answers for future policies. John Michael Vlach, professor of anthropology and American Studies who was involved with a controversial exhibit at the Library of Congress about African slavery in the United States, insists, "A controversial topic such as the history of slavery cannot be expected to move serenely through the public; as the stuff of difficult history, it is guaranteed to provoke a strong reaction. But if the passions that are stirred can be harnessed to a useful social project, such as preparation for a sustained struggle for social reform, then difficult history can fulfill the promise at which all scholars aim." Anthropologist Richard Flores observes, "Myth of history, cultural memory or public history, stories of the past track through us and over us as they provide narrative representations and public imaginaries that help us to make our way through the world." He reminds us that "forgetting is not a passive experience; like remembering, it is an active process that involves erasure." By failing to pass the legislation for the Manhattan Project National Historical Park, which would have preserved and interpreted perhaps the most significant event of the twentieth-century, the U.S. House of Representatives has effectively erased this history from the official national memory.[63]

Instead, the National Park Service, which has proven its capability and willingness to interpret multiple perspectives about difficult histories, should be allowed to show a maturity by the United States about its history by confronting its past with all its complexities rather than wishful attempts of cleansing. Anthropologist Andrew Lass cautions that the "nation-state's concern for remembrance, or encoding, is paralleled only by its obsession with forgetting, or erasure." Having the courage to create the Manhattan

[63] John Michael Vlach, "The Last Great Taboo Subject: Exhibiting Slavery at the Library of Congress," James Oliver Horton and Lois E. Horton, eds., *Slavery and Public History: The Tough Stuff of American Memory* (New York: The New Press, 2006), 72; Richard Flores, *Remembering the Alamo: Memory, Modernity, and the Master Symbol* (Austin: University of Texas Press, 2002), x, xv.

Project National Historical Park would help the United States transcend this pattern and demonstrate responsibility about its past that continues to affect its present and future. Robert Bevan, who writes widely and frequently about architecture and design, warns against the destruction of the built environment as a destruction of memory, as he views "the destruction of the cultural artefacts of an enemy people or nation as a means of dominating, terrorizing, dividing or eradicating it altogether." By demonizing the Manhattan Project and the national park dedicated to it, opponents of the Manhattan Project National Historical Park have effectively created a historical enemy, which they wish to eradicate from national memory as a way of censuring it. Bevan goes so far as to call this practice "the pursuit of ethnic cleansing or genocide by other means, or the rewriting of history in the interests of a victor reinforcing his conquests." He explains, "That which is valued by a dominant culture or cultures in society is preserved and cared for: the rest can be mindlessly or purposefully destroyed, or just left to rot." The significance and impacts of the Manhattan Project must drive the dominant culture, expressed through the U.S. national government, to nurture the Manhattan Project National Historical Park, instead of intentionally omitting (as the U.S. House of Representatives did by blocking the legislation to establish the national park) this critical story from the national narrative.[64]

For those opposed to all things nuclear in the present and future, the Manhattan Project National Historical Park does not diminish their perspective but rather offers the forum and opportunity to include and remember their voices. A poignant site for

[64] Andrew Lass, "Romantic Documents and Political Monuments: The Meaning-Fulfillment of History in 19th-Century Czech Nationalism," *American Ethnologist* 15 (3), 1988, p. 467; Robert Bevan, *The Destruction of Memory: Architecture at War* (London: Reaktion Books, 2006), 8, 11-12.

provoking reflection, contemplation, analysis, conversation, and debate about the merits of nuclear technology in past and present societies serves as perhaps the best way to keep the disagreement alive – preventing the risk of losing this complexity to official narratives. As anthropologist Richard Flores delineates, "Memory-place, and its physical and concrete evidence, validates and authenticates a specter of the past, whereas official history – intent on unraveling the temporal movement of the past with its sources and archives – is only as solid as the narrative it produces." Ironically, in attempting to cleanse the contested history of the United States and the world, those opposed to the Manhattan Project National Historic Park could allow for the flourishing of a simplified official narrative as outlined by Flores, thus running the risk of what distinguished geographer David Lowenthal alerts: "Credence in a mythic past crafted for some present cause flies in the face of the past's actual complexity and precludes impartial historical knowledge." With the complexity of history, since the historical moment of the creation of the bomb, vigorous debate ensued about whether or not its use was necessary, justified, and ethical; opposition to dropping the atomic bomb came from all sides of the political spectrum, including Protestant and Catholic spokespeople, *National Review*, *Time*, *New York Times*, and *United States News* – and perhaps most remarkably, some scientists involved in the Manhattan Project. Without the well-established emotional impact of standing and learning at the historic site itself, these historic and contemporary disputes could be lost to seemingly inevitable and obvious narratives constructed by straightforward official histories, the nature and worrisome effect of which John Michael Vlach articulately outlines and captures in the context of American slavery:

> *The difficulty and awkwardness that most Americans experience when discussing the history of racial slavery in the United States can be traced… to the inadequate textbooks that they are compelled to read while in high school… The authors of these volumes generally recount the dramatic events of America's formation in such bland diction that these books become the printed equivalents of "mumbling lectures." Further, by being so committed to positive and uplifting portrayals, these writers unwaveringly follow a "progress as usual" story line and thus treat our long history of slavery as merely a temporary aberration that had no lasting consequences. Such an approach not only marginalizes slavery and its attendant racist ideology but also marks the topic as one requiring no further discussion.*

Applied to nuclear history, this type of manifest and predestined narrative would not only obscure the contested history of nuclear weapons but also, as a result, reduce the viability and vitality of a continued discussion about the validity of nuclear technology.[65]

The professional study of history no longer reveres but instead remembers its subjects of study; professional historic preservation reflects the same sober analysis, especially in the National Park Service. Max Page and Randall Mason, who work in many disciplines including history, note, "The academic field of American history has been fundamentally transformed over the past generation. Historians now routinely seek out the variety of perspectives on a particular time or place, and we value many formerly

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[65] Richard Flores, *Remembering the Alamo: Memory, Modernity, and the Master Symbol* (Austin: University of Texas Press, 2002), 21; David Lowenthal, "The Heritage Crusade and Its Contradictions," in Max Page and Randall Mason, eds., *Giving Preservation a History: Histories of Historic Preservation in the United States* (New York: Routledge, 2004), 21; Edward T. Linenthal, "Anatomy of a Controversy," in Edward T. Linenthal and Tom Engelhardt, eds., *History Wars: The Enola Gay and Other Battles for the American Past* (New York: Henry Holt and Company, 1996), 10-11; John Michael Vlach, "The Last Great Taboo Subject: Exhibiting Slavery at the Library of Congress," James Oliver Horton and Lois E. Horton, eds., *Slavery and Public History: The Tough Stuff of American Memory* (New York: The New Press, 2006), 57.

invisible and disturbing aspects of our history." The National Park Service reflects this growth in appreciation of more diverse perspectives to develop more complicated narratives. Edward Linenthal, who studies American culture and remains involved in public history, affirms, "At Gettysburg, diverse ceremonies at the 125th anniversary in 1988 revealed different readings of the meaning of the Civil War. Growing sensitivity to less-heroic interpretations of the Anglo-American frontier has profoundly altered the National Park Service's interpretation of the significance of the battle of the Little Bighorn. And at Pearl Harbor, the Park Service is charged with interpreting a site that for many is still an 'open wound.'" Clearly, the National Park Service has demonstrated its ability to change over time and to adapt to fresh and multifaceted interpretations. It remains the American institution at "the forefront of historic preservation," as historian Hal Rothman acknowledges, and it has matured over several decades: "After being keepers of the ceremonial landscapes during the 1920s, the Park Service had become guardians of a cultural heritage." Indeed, the National Park Service has proven itself the appropriate custodian of the vital historic sites and stories related to the Manhattan Project. Janice Dubel, a human rights activist throughout Asia, recognizes the tackling of critical interpretations by the National Park Service at Manzanar National Historic Site, which "represents Japanese-Americans who were presumed guilty wholly on the basis of their race." The Manhattan Project National Historical Park would employ the same judiciousness in interpreting nuclear history.[66]

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[66] Max Page and Randall Mason, "Rethinking the Roots of the Historic Preservation Movement," in Max Page and Randall Mason, eds., *Giving Preservation a History: Histories of Historic Preservation in the United States* (New York: Routledge, 2004), 15; Edward Tabor Linenthal, *Sacred Ground: Americans and Their Battlefields* (Champaign: University of Illinois Press, 1991, 1993), 6; Hal Rothman, *America's National Monuments: The Politics of Preservation* (Lawrence: University Press of Kansas, 1989), 209, 188; Janice L. Dubel, "Remembering a Japanese-

Professional historical interpretation understands its role of presenting complicated narratives that connect the audience to the historic resource and thus spark awareness, research, contemplation, and discussion. The master philosopher of interpretation, Freeman Tilden proclaimed over half a century ago, "The chief aim of interpretation is not instruction, but provocation… The purpose of interpretation is to stimulate the reader or hearer toward a desire to widen his horizon of interests and knowledge, and to gain an understanding of the greater truths that lie behind any statements of fact." Tilden's six principles of interpretation still serve as the basis for interpretive planning in the National Park Service. He realized, "Interpretation should aim to present a whole rather than a part… A cardinal purpose of interpretation… is to present a whole rather than a part, no matter how interesting the specific part may be." Larger whole stories of which the Manhattan Project is an integral part surround the themes of scientific achievement, energy production, military history, government secrecy, executive power, international relations, Cold War, and global reconfiguration.[67]

A respected federal institution had already been blocked from interpreting these pervasive historical themes nearly two decades prior to the failed Congressional vote on the Manhattan Project National Historical Park Act – the same mistake cannot be

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American Concentration Camp at Manzanar National Historic Site," in Paul A. Shackel, ed., *Myth, Memory, and the Making of the American Landscape* (Gainesville: University Press of Florida, 2001), 100. Edward T. Linenthal, who was involved as a historian with Little Bighorn Battlefield National Monument in the 1980s, also refers to the effort to "transform the Little Bighorn battlefield from a shrine to George A. Custer and the Seventh Cavalry into a historic site where different – often clashing – stories could be told… I had watched as a complex interpretation of a mythic American event had successfully supplanted an enduring 'first take," in Edward T. Linenthal, "Anatomy of a Controversy," in Edward T. Linenthal and Tom Engelhardt, eds., *History Wars: The Enola Gay and Other Battles for the American Past* (New York: Henry Holt and Company, 1996), 9.

[67] Freeman Tilden, *Interpreting Our Heritage* (Chapel Hill: University of North Carolina Press, 1957, 1967, 1977, 2007), 35, 59, 35, 68.

repeated. The *Enola Gay* exhibit in the Smithsonian Institution's National Air and Space Museum demonstrated the perils of having the courage to confront the challenge of interpreting these contested historical themes, and the reaction that it sparked only further reinforced the timeliness and relevance of ensuring continued preservation and interpretation of this historical moment. Richard Kohn, the renowned military historian who helped advise the exhibit's plan, considers the cancellation of this 1995 exhibit "one of the worst tragedies to befall the public presentation of history in the United States in this generation… [It] forfeited an opportunity to educate a worldwide audience of millions about one of the century's defining experiences." As with the risk inflicted upon the National Park Service by the active failure of the U.S. House of Representatives to establish the Manhattan Project National Historical Park, the Smithsonian Institution's integrity was compromised: "Thus one of the premier cultural institutions of the United States and its foremost museum system surrendered its scholarly independence and a significant amount of its authority in American intellectual life to accommodate to a political perspective." These implications are far-reaching, as Kohn surmises, "If the idea that everything is politics now colors American cultural life, civic discourse could begin to succumb to the suppression characteristic of the totalitarian regimes Americans have fought and died to defeat." Still more worrisome, Kohn warns, "Unable to explore their past openly or critically, Americans might endanger their political system and damage the liberty on which that system is based and which it is designed to preserve."[68] The consequences of obstructing the Manhattan Project National Historical Park, now several

[68] Richard H. Kohn, "History at Risk: The Case of the *Enola Gay*," in Edward T. Linenthal and Tom Engelhardt, eds., *History Wars: The Enola Gay and Other Battles for the American Past* (New York: Henry Holt and Company, 1996), 140, 141.

years in the making, are extensive in ways that bring to fruition precisely the concerns of those who oppose its establishment.

The Manhattan Project National Historical Park Act has not died just yet. Despite the retirement from the Senate of the bill's greatest champion and co-sponsor, Jeff Bingaman, the 113th Congress has retained some key supporting voices. The opportunity, and the duty and obligation, still remains. The significance of the Manhattan Project is unquestioned, as the intense disputes surrounding its commemoration remind us; thus, its critical sites and stories must be preserved. Applying the latest theories and practices of historic preservation are necessary; the field of historic preservation has grown to grapple with varied and complicated perspectives. The National Park Service is the best entity to execute this challenging, momentous, and expert task; it has proven its capability and willingness to offer diverse viewpoints about multifaceted stories that carry emotional charge. Such a glaring exclusion compromises the integrity and respectability of the National Park Service; omitting perhaps the most transformative event of the twentieth-century from the national narrative due to a sense of shame reveals an immature lack of responsibility and deliberate manipulation and distortion of its record on the part of the nation-state in order to avoid confronting its past. Opportunities are vast for provocative and relevant interpretation and education to spark worthwhile and relevant reflection and debate; the Manhattan Project National Historical Park must become a reality.

CHAPTER 6

CONCLUSION: ADVOCATING NUCLEAR HISTORY

Nuclear history remains contentious, because it has cost many lives and does not seem entirely controllable when public attention focuses on famous accidents. In particular, the Manhattan Project National Historical Park sparks sharp reactions because of the underlying question of whether the dropping of the bombs made strategic and moral sense. The Manhattan Project itself was so focused on developing the science and engineering necessary to end the war that its participants likely did not foresee its impact for decades to come. Still, the historical memory of this event remains driven by perceptions of the Second World War and the hindsight of the effects of the Cold War and beyond. The impact of the Manhattan Project on these historically defining eras makes an overwhelming case for the establishment of the Manhattan Project National Historical Park. The National Park Service has proven that it is equipped to take on this difficult task of both preserving these resources and interpreting these stories with many perspectives. It has shown that it can fairly interpret the many narratives that become evident from the process of the public debate.

Debating the meanings of the Manhattan Project National Historical Park reveals that the field of historic preservation must continue to uphold a high standard and perhaps even elevate its advocacy when it comes to nuclear histories so intensely revisited during the upcoming decades following the Cold War, especially as the Cold War becomes a historic item. Failing to do so would undermine the credibility of historic preservation as

having advanced beyond mere glorification. Omitting the Manhattan Project National Historical Park due to opposition to nuclear politics would serve to reinforce the notion of preserving only that history which a nation decides as worth exalting, because it would avoid confronting the reality of the past of the United States so influenced by nuclear history.

Much of the debate surrounding the legitimacy of creating the Manhattan Project National Historical Park becomes reduced to an ethical question about whether or not using nuclear weapons on Japan was morally justified and strategically necessary to end the Second World War. This underlying question will never have a definitive answer, and thus, historians and the public alike will never reach a consensus. More importantly, possible answers to this question are a distraction from the central concern in discussing the creation of the park: whether or not these Manhattan Project sites are worthy of preservation, and whether the National Park Service is the appropriate steward. The frame of conversation must move away from the counter-factual assumptions and assertions about the use (or avoidance) of the atomic bomb, and it must focus instead on the question of the significance of the history that unfolded, including events as well as moral ambiguities that still fuel on-going social and current policy debates.

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