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Growing Up Nuclear: Las Vegas Children and the Bomb

by

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Abstract

This thesis is a study of how children living in Las Vegas, Nevada, understood, experienced, and were affected by nuclear tests at the nearby Nevada Test Site. It links their experiences of the test site to their exposure to civil defense programs, and to their more general experiences of the Cold War, suggesting that these inter-related concerns had a cumulative impact on children. The study is based on a series of oral history interviews conducted in Las Vegas, and on documentary and published sources from archives in Nevada. It suggests that each of the individuals interviewed experienced childhood differently, but that those of them who had similar memories were more likely to have similar political views on nuclear issues when they were interviewed. These similarities, however, suggest a complex interrelationship between memory and political belief, rather than a simple relationship of cause and effect.

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CHAPTER ONE: INTRODUCTION

When she was seven years old, Bridget McKenna and her classmates were allowed to stay home from their Las Vegas, Nevada school, so that they could be with their families to see the flash of an atomic bomb being detonated, and watch a mushroom cloud rise in the skies above Las Vegas. McKenna remembered that “we took a blanket out on the front lawn and watched the mushroom cloud go up.” She thought the experience was “an exciting, new thing.” Reflecting on her experience years later, she described her memory of the event as “chillingly quaint.”¹

Like McKenna, most children living in Las Vegas during the 1950s had experiences of the nuclear bomb and the Cold War that set them apart from other American children. Their city was located less than seventy miles from the Atomic Energy Commission’s (AEC’s) Nevada Test Site, where over 900 nuclear tests were carried out between 1951 and 1992. Originally known as the Nevada Proving Ground, the Nevada Test Site (NTS) was created by President Harry S Truman on December 18, 1950. Tests began in January 1951.² The majority of nuclear tests conducted at the test site were conducted underground, but there were over 100 announced atmospheric tests. All of these occurred between 1951 and 1963, when the Limited Test Ban Treaty disallowed atmospheric explosions. Throughout the 1950s, Las Vegans saw flashes from nuclear explosions, felt tremors and shockwaves, and even had the windows of their homes and businesses broken by the detonations. Their city was repeatedly thrown into

¹ Bridget McKenna, interviewed by Timothy Cole, May 31, 2005, Las Vegas, Nevada.

² While it was known as the Nevada Proving Ground until 1955, the test site will be referred to here as the Nevada Test Site (NTS), or simply as the test site, except in quotations from sources which predate 1955.

the national spotlight when tests were carried out, and besieged by reporters and test site spectators whenever a test series had been announced in advance.

The nuclear tests became the subject of considerable controversy during the course of the 1950s, as various news reporters, anti-nuclear activists, and politicians began to worry about the spread of fallout from Nevada, and the potential health damage this radiation could cause. The test site was closely linked to controversies and debates surrounding test ban treaties.³ More recently, it has been at the centre of a legal and political battle over compensation for the people known as downwinders, most of whom lived in Utah and Arizona, and whose health was damaged by the atomic tests. A similar controversy has surrounded a group of atomic veterans, who were sent into radioactive areas or were stationed within two thousand yards of a nuclear explosion during some of the tests. These have often been very bitter debates.⁴

In the early 1950s, however, there was very little evidence of similar struggles or concerns in Las Vegas. When the first tests began, Las Vegas Mayor Ernie Cragin announced himself to be “100 percent behind the project,” and the *Las Vegas Review Journal* noted that “from the Civil War through World War II, the state of Nevada has always been in the vanguard in the support of such warfare.”⁵ Las Vegas considered its

³ For a scholarly history of these controversies, see Robert A. Divine, *Blowing on the Wind: The Nuclear Test Ban Debate, 1954-1960* (New York: Oxford University Press, 1978).

⁴ The body of literature on these topics is quite large. Some of the best examples are: Costandina A. Titus, *Bombs in the Backyard: Atomic Testing and American Politics* (Reno: University of Nevada Press, 1986); Barton C. Hacker, *Elements of Controversy: The Atomic Energy Commission and Radiation Safety in Nuclear Weapons testing 1947-1974* (Berkeley: University of California Press, 1994); Philip L. Fradkin, *Fallout: An American Nuclear Tragedy* (Tucson: University of Arizona Press, 1989); Howard Ball, *Justice Downwind: America's Atomic Testing Program in the 1950's* (Oxford: Oxford University Press, 1986).

⁵ Quoted in Eugene P. Moehring, *Resort City in the Sunbelt: Las Vegas 1930-1970* (Reno: University of Nevada Press, 1989), 98.

status as the unofficial host city of the test site to be a source of pride, and an economic boon. The test site both employed people living in Las Vegas, and brought new workers and tourists into town. It also raised the city's profile in the national media, when reporters who came to cover the tests invariably gave Las Vegas' gambling industry a publicity boost. Many of the ways Las Vegas businesses and public officials attempted to exploit the tests to promote their business or boost the city have since become famous. The "Miss Atomic Bomb" beauty contest, for example, or the "Atomic Cocktail," are frequently cited as examples of atomic kitsch.⁶

Of course, Las Vegas' love affair with the test site and all things atomic did not last forever, as the ongoing controversies surrounding the Yucca Mountain Project have revealed. This project, run by the Department of Energy's Office of Civilian Radioactive Waste Management, is directed at storing high-level radioactive waste beneath Yucca Mountain, about 100 miles northwest of Las Vegas, for a period of at least 10,000 years. The project has yet to gain the approval of the U.S. Nuclear Regulatory Commission, and has attracted considerable protest from anti-nuclear, environmentalist, and indigenous groups.⁷

This study analyzes how one group of Las Vegans reacted to the tests. It examines how children growing up in Las Vegas between 1951 and 1963 experienced, understood, and were affected by the Nevada Test Site and the atomic age. Specifically,

⁶ One of the most comprehensive analyses of these phenomena can be found in Titus, *Bombs in the Backyard*, 93-100.

⁷ K.S. Shrader-Frechette, *Burying Uncertainty: Risk and the Case Against Geological Disposal of Nuclear Waste* (Berkeley: University of California Press, 1993); Alison M. McFarlane and Rodney C. Ewing, *Uncertainty Underground: Yucca Mountain and the Nation's High Level Nuclear Waste* (Cambridge, MA: MIT Press, 2006).

it analyzes childhood memories of the tests to discover how children understood and experienced them, and how the tests appeared from the unique perspectives of children. This study does not intend to add to the literature on test site downwinders, as Las Vegas was generally upwind of the test site, and there is little evidence to support the idea that Las Vegas suffered the same physical harm as people downwind of the test site. Instead, it seeks to trace the political, psychological, and social effects of the test site on Las Vegas children. It will also follow the development of individual feelings about the bomb and nuclear technology over time, to discover whether childhood experiences of the test site had an impact on adult opinions about nuclear weapons and nuclear waste.

Based both on oral history interviews with individuals who grew up in Las Vegas during the period of atmospheric testing, and on a variety of published and archival sources, this research will examine the tests from the perspectives of the children, and from the perspectives of parents, teachers, and government authorities, who sought to control and shape children's experiences of the atomic bomb. Because adults often expressed their concerns about nuclear testing and the bomb as concern for their children, these concerns also shed some light on adult attitudes toward the tests. Children's experience of the atomic tests was something which different groups of adults sought to control and alter, with the result that the experiences of children were often the result of negotiation and compromise between rival adult views on the significance of the tests to children. Because of this, it will sometimes be important to understand the reactions of adults, as well as those of children, in order to understand children's responses to the tests.

During the course of this research, it became clear that children's experiences of the test site could not be studied in isolation from their exposure to the broader events and atmosphere of the Cold War. Both at the time and in later years, most children recognized the link between events at the test site and the Cold War.⁸ Adult efforts to reassure and educate children about the test site were often tied to civil defense programs, which were the chief means of educating children about the atomic bomb. Children's attitudes towards the test site, then, were closely related to civil defense programs, as well as to their broader understanding of the Cold War. In order to understand the impact of any one these categories of experience on children, they must be examined together. Here, each topic is examined in a separate chapter, and their cumulative impact assessed in the conclusion.

Chapter Two deals with children's responses to the test site, and begins by outlining how the community as a whole reacted to the first few years of testing. It then examines children's experiences of the tests, before tracing the development of opposition to them. Finally, it assesses the long term impact which the testing had on some of the children who grew up in Las Vegas. Children's experiences of civil defense is examined in Chapter Three. It begins by showing how Las Vegas civil defense programs were closely linked to events at the test site, and by tracing the civil defense messages that children received at home and at school. Las Vegas implemented two identification programs that are examined in more depth, because of their particular

⁸ For an outline of how children experienced different elements of the Cold War holistically, see Christopher O'Brien, "And Everything Would Be Done to Protect Us: The Cold War, the Bomb, and America's Children, 1945-1963" (Ph.D. diss., University of Kansas, 2002). Paul S. Boyer drew a similar conclusion in *By the Bomb's Early Light: American Thought and Culture at the Dawn of the Atomic Age* (New York: Pantheon, 1985), in regard to adult perceptions of the bomb.

importance to children. Then, the impact of these experiences is assessed. Chapter Four focuses on children's more general responses to the Cold War. It examines how children were taught about the Cold War, communism, and the atom in school, and compares these messages to the ones that children received at home, from their families and through popular culture. Children often had some interesting perceptions of who their Cold War enemy was, and what an atomic attack would be like, which are examined in detail before assessing children's experiences of the Cold War in more general terms. Finally, in the concluding chapter of this study, the cumulative impact of all of these factors is analyzed, with particular attention being paid to their long term impact on the individuals interviewed.

Given their close proximity to the test site, it is not surprising that in 1952, *Colliers* magazine labeled children living in the Las Vegas area "Our Most Atom Wise Kids."⁹ Unlike other American children, who saw only pictures and films of nuclear bombs, their childhood experiences of the atom bomb and Cold War were punctuated by their exposure to actual nuclear explosions. Las Vegas was also influenced by its proximity to Nellis Air Force Base, where military pilots trained and new or experimental aircraft were tested throughout the Cold War. In Las Vegas, children's experiences of the nuclear age were much more intense than those of children living in other cities, and are therefore somewhat easier to study and trace. As unique experiences, they are important to the history of Las Vegas, the history of the test site, and the history of nuclear politics. This study will engage with and contribute to each of these areas of study.

⁹ Robert Cahn, "A is for Atom," *Colliers*, June 21, 1952., 15.

While Las Vegas children's experiences of the nuclear bomb were unique, they also reveal a great deal about how children elsewhere reacted to the atomic age. Children in Las Vegas were exposed to many of the same civil defense programs, television shows, and educational materials as children throughout the United States. Their reactions to these materials and the atmosphere of the Cold War era can at least suggest how children in other areas might have reacted to similar experiences. Certainly, their experiences are comparable to those of children living near other nuclear installations. In this sense, this study also engages with a much broader historiography, of children during the Cold War, of nuclear weapons sites, and the social and cultural history of the Cold War in the United States.

The Historiography of Cold War Society and Culture

The reactions of Americans to the atomic bomb and Cold War have attracted considerable attention and research from American historians and other scholars. While popular and scholarly works on the impact of the atomic age were produced throughout the Cold War era in the United States, historical study of American reactions to the bomb and Cold War began in earnest during the mid 1980s.¹⁰ This continues to be an active area of historical debate and inquiry. Much of the literature has focused on analyzing Cold War culture, and its relationship to political and social change in American society during the Cold War period. Building upon Paul Boyer's excellent study of American society's initial reaction to the atomic bomb, *By the Bomb's Early Light*, numerous

¹⁰ Some of the most prominent works produced during the Cold War were Don J. Bradley, *No Place to Hide* (Hanover, NH: 1984); Herman Kahn, *On Thermonuclear War* (Princeton: Princeton University Press, 1960); John Hershey, *Hiroshima* (New York: Alfred A. Knopf, 1946); Nevil Shute, *On The Beach* (New York: William Morrow and Co., 1957).

scholars have attempted to explain and analyze American cultural responses to the atomic bomb and Cold War.¹¹

This large body of literature has been primarily concerned with the analysis of cultural sources, and with debates over whether the advent of the atomic bomb gave birth to new and distinct cultural forms, as Paul Boyer, Lary May, and Margot Hendriksen have suggested, or whether existing images and symbols gave meaning to the nuclear age, as has been suggested by Spencer Weart.¹² Many studies have focused quite narrowly on analyzing popular culture and mass media in order to infer the reactions of Americans to the Cold War and atomic age. Collectively, these works have become somewhat absorbed in a “chicken or egg” debate, over whether the atomic age, the Cold War, and the bomb were responsible for many of the social and cultural changes of the 1950s, or whether the immediate concerns of the Cold War era were mobilized to aid or to counteract cultural and social changes already in progress. Many of these works have been written from an anti-nuclear perspective, and have therefore sought to explain a perceived lack of public opposition to nuclear weapons, or to suggest that protest and

¹¹ Some of the most important works are: Spencer Weart, *Nuclear Fear: A History of Images* (Cambridge: Harvard University Press, 1988); Allan M. Winkler, *Life Under A Cloud: American Anxiety about the Atom* (Chicago: University of Illinois Press, 1993); Alan Nadel, *Containment Culture: American Narratives, Post-Modernism, and the Atomic Age* (Durham: Duke University Press, 1995); Stephen J. Whitfield, *The Culture of the Cold War* (Baltimore: Johns Hopkins University Press, 1991); Kenneth D. Rose, *One Nation Underground* (New York: New York University Press, 2001) and Margot Hendriksen, *Dr. Strangelove's America: Society and Culture in the Atomic Age* (Berkeley: University of California Press, 1997); Alison M. Scott and Christopher D. Geist, *The Writing on the Cloud: American Culture Confronts the Atom Bomb* (Lanham: University Press of America, 1997); James Gilbert and Peter J. Kuznick, *Rethinking Cold War Culture* (Washington: Smithsonian Institution, 2001); Lary May, *Recasting America: Culture and Politics in the Age of Cold War* (Chicago: University of Chicago Press, 1989).

¹² Weart, *Nuclear Fear*, 421-426.

concern was expressed indirectly, through the contesting and subverting of dominant cultural narratives.¹³

Boyer's study was among the first to be published, and set the tone for much of the subsequent scholarship. His study was directed at understanding how "a people react when the entire basis of its existence is fundamentally altered," and suggested that "the nuclear era was different . . . the American people recognized that things would never be the same again."¹⁴ Subsequent works built upon this theme, stressing that the dawn of the nuclear age led to what Lary May has called "a new phase" in American history, and "a paradigm shift of major proportions."¹⁵

A different way of analyzing Cold War culture, and a second view of the impact of the atomic bomb on American life, was pioneered by Spencer Weart in 1988. Unlike Boyer, Weart contended in *Nuclear Fear: A History of Images*, that "modern thinking about nuclear energy employs imagery that can be traced back to a time long before the discovery of radioactivity," a fact that Weart found disturbing, because it suggested that "such thinking has less to do with current physical reality than with old, autonomous features of our society, our culture, and our psychology."¹⁶ Perhaps because Weart was more concerned with the analysis of images than with documenting historical change, understandings of the bomb and Cold War as revolutionary forces in American culture have persisted in historical literature long after the publication of his work.

¹³ Hendriksen, *Dr. Strangelove's America*, xiv-xxvi.

¹⁴ Boyer, *By the Bomb's Early Light*, 3-4.

¹⁵ May, *Recasting America*, 14.

¹⁶ Weart, *Nuclear Fear*, 421.

Boyer suggested that “all of the major elements of our contemporary engagement with the nuclear reality took shape literally within days of Hiroshima,” and that by 1950, “the obsessive post-Hiroshima awareness of the horror of the atomic bomb had given way to an interval of diminished cultural attention,” and to “uneasy acquiescence in the goal of maintaining atomic superiority over the Russians.”¹⁷ Other scholars have disagreed, and sought to trace the development of public resistance to American nuclear arms programs and Cold War foreign policy. In *Dr. Strangelove’s America*, for example, Margot Hendriksen sought to show how Cold War film, television, and literature often contained subtle and hidden protests against the ideology of the Cold War.¹⁸

In *Life Under a Cloud*, Allan M. Winkler sought, in a similar way, to explain why Americans did not protest in stronger terms the danger inherent in their nation’s nuclear arsenal. Winkler concluded that they did, but only in fits and starts, and that military and political policy makers succeeded in co-opting or undermining anti-nuclear sentiment by making limited concessions at key moments, thus making sustained public protest impossible.¹⁹ According to Winkler, “each time, after marginal success, anti-nuclear activism disappeared. Although serious problems still demanded solutions, most Americans . . . seemed unwilling to confront the issue further.”²⁰ As a result, he argued, “deep-rooted and corrosive fears of nuclear destruction have failed in the past fifty years to bring atomic weaponry under effective control.”²¹

¹⁷ Boyer, *By the Bomb’s Early Light*, xix, 352.

¹⁸ Hendrikson, *Dr Strangelove’s America*, xiv-xvi.

¹⁹ Winkler, *Life Under a Cloud*, 209-214.

²⁰ *Ibid.*, 4.

²¹ *Ibid.*, 4.

Other scholars have suggested that anti-communism was much more important than the bomb in Americans' experience of the Cold War years. In *The Culture of the Cold War*, for example, Stephen J. Whitfield concluded that during the Cold War "the geographical contest between two superpowers haunted public life, pervading it so thoroughly that the national identity itself seemed to become disfigured." Similarly, multiple studies of Cold War anti-communism and red scares have emphasized the importance of these events and trends to the American experience of the Cold War.²²

By analyzing Cold War culture, historians have amassed considerable evidence of the transformative impact of the atom bomb and Cold War on American society and culture. Weart's study, however, represented an early form of an alternative view. More recently, historians have begun to criticize the narrow focus on popular culture that characterized some of the studies discussed above. Peter Kuznick and James Gilbert argued in the introduction to their anthology, *Rethinking Cold War Culture*, that there is much more to the culture of the Cold War period than the atom bomb and the struggle with the Soviet Union. They encouraged historians not to lose sight of all of the other transformations and trends in American society and culture that were occurring at the same time, and not to confuse these trends and transformations with Cold War-related factors that were also causing change.²³ "We take issue," they wrote, "with those observers who have found the Cold War to be responsible for every change and cultural

²² Some of the most useful studies are: Michael Barson and Stephen Heller, *Red Scared: The Commie Menace in Propaganda and Popular Culture* (San Francisco, Chronicle, 2001); Ted Morgan, *Reds: McCarthyism in Twentieth Century America* (New York: Random House, 2003); Thomas Patrick Doherty, *Cold War, Cool Medium: Television, McCarthyism, and American Culture* (New York: Columbia University Press, 2003); Richard M. Fried, *Nightmare in Red: The McCarthy Era in Perspective* (New York: Oxford University Press, 1990).

²³ Kuznick and Gilbert, *Rethinking Cold War Culture*, 4-5.

distortion occurring in these years.”²⁴ These works represent an important step forward for the historiography of Cold War society and culture, because they expand the exploration of Cold War culture to include a longer time period, and pay increased attention to social and political developments rather than maintaining too narrow a focus on mass culture.

Although produced somewhat earlier, Elaine Tyler May’s study of Cold War families, *Homeward Bound*, represented a similar effort to examine the impact of the Cold War in broader terms. May placed more emphasis on the actual experiences of Americans through her use of the Kelly Longitudinal Study, a psychological study that followed a group of 600 individuals who filled out questionnaires periodically from the 1930s through the 1950s. Their responses enabled May to spotlight the experiences of some of the consumers of the cultural output of the Cold War era, which had previously been analyzed independently.²⁵ May’s study was ostensibly a study of families during the Cold War, but focused primarily on the prescribed roles of women and domesticity during the Cold War era, relating the Cold War philosophy of containment to American ideals about the home.²⁶ According to May, the home was the center of American responses to the Cold War, where “potentially dangerous social forces of the new age might be tamed, where they could contribute to the secure and fulfilling life to which postwar men and women aspired.” This ideology of domestic containment was upheld by a powerful political culture. May argued that “containment aptly describes the way in

²⁴ Ibid., 11.

²⁵ Elaine Tyler May, *Homeward Bound: American Families in the Cold War Era*, (New York, Basic Books, 1988), 11-12.

²⁶ May, *Homeward Bound*, 14.

which public policy, personal behavior, and even political values were focused on the home.”²⁷

May’s treatment of containment as a concept that applied equally to foreign policy and to Americans’ private lives was also an important component of Alan Nadel’s analysis in *Containment Culture*. Nadel’s work was written from a very different theoretical perspective, and aimed to show how the Cold War led to the adoption of national policies as part of the “cultural agenda of a citizenry” in a manner that “anticipated” post-modernism. Nadel, like May, concluded that the culture of the Cold War was dominated by a fusion of “the sexual, political, and economic aspects of containment.” Nadel recognized, however, that “containment was the name of a privileged American narrative during the Cold War.” This narrative was a “particularly useful example of the power of large, cultural narratives to unify, codify, and contain – perhaps *intimidate* is the best word – the personal narratives of its population.” The construction of these narratives, according to Nadel, “allowed a significant portion of the population to link its sense of self – the story of its life – to national history.”²⁸ Joanne Meyerowitz brought new insight to these discussions on imagery and narrative, by suggesting that Cold War narratives of containment and domesticity did not always reflect or define the realities of domestic life. In her anthology *Not June Cleaver*, Meyerowitz demonstrated that the lives of post-war women did not reflect dominant cultural narratives, which were themselves being contested and undermined by women.²⁹

²⁷ Ibid., 14.

²⁸ Nadel, *Containment Culture*, 2, 4, 8.

²⁹ Joanne Meyerowitz, ed. *Not June Cleaver: Women and Gender in Postwar American, 1945-1960* (Philadelphia: Temple University Press, 1994).

Works like May's and Nadel's represented an important step forward because of their efforts to relate cultural sources studied by other historians to the day-to-day political and social realities of Cold War America, and to explore the responses of ordinary Americans to these sources. Similarly, Meyerowitz's work allows for a more thorough interrogation of these cultural sources, and allows for post-war homes to be viewed as sites of cultural contestation, rather than as passive targets of dominant cultural narratives. Nadel's focus on personal narrative suggests that the true effects of the Cold War on American life can only be understood by examining such narratives, as through oral history. Kuznick and Gilbert's collection also represented an important step forward, by suggesting that the construct of Cold War culture can be limiting, and must be understood in a much broader context, by studying a wider variety of sources and historical trends. While this study cannot hope to resolve debates about the revolutionary nature or inherent continuity of American responses to the Cold War, both perspectives offer an interpretive framework which can be applied to this research. Weart's ideas about nuclear imagery are particularly suited to the analysis of childhood memories and oral history, while the use of cultural sources to suggest the general reactions of a population, as exemplified by Boyer's study, will also be useful here. This study offers an opportunity to test and observe May's and Nadel's understandings of containment, since it deals extensively with the intersection of the home, personal narratives, and the larger narratives of the Cold War. Recent studies, such as the essays contained in *Rethinking Cold War Culture*, are an important reminder that the political and social context of Las Vegas children's experiences cannot be divorced from their memories of the Cold War and atomic bomb.

The Historiography of Nuclear Communities

A separate body of historical literature has examined the American experience of the Cold War and the nuclear era by focusing on areas where the Cold War and nuclear arms intersected most directly with American life. They include studies of nuclear scientists, studies of communities near nuclear installations, and regional studies of the Nuclear West. Fascinating studies of how nuclear scientists related to their work, for example, have been produced by Hugh Gusterson and Richard Rhodes. Since they focus on a unique group of individuals, however, their applicability to this study is somewhat limited.³⁰ Scholars Len Ackland and Michelle Stenehjem Gerber have chronicled the damage done to two communities (Rocky Flats, Colorado, and Hanford, Washington) by nearby nuclear installations.³¹ Ackland suggested that Rocky Flats epitomized “the worst mistakes of the twentieth century,” and critiqued the “myopic notion that a nation can preserve its security by building weapons of mass destruction that place incalculable numbers of men, women, and children at risk.”³² While Gerber did not condemn Hanford in such strong terms, works of this type have often focused too narrowly on questions of injustice and blame.³³ John Hunner’s recent work, *Inventing Los Alamos* is an example of how the relationship between a community and a nuclear project can be

³⁰ Hugh Gusterson, *People of the Bomb: Portraits of America's Nuclear Complex* (Minneapolis: University of Minnesota Press, 2004); Hugh Gusterson, *Nuclear Rites: A Weapons Laboratory at the End of the Cold War* (Berkeley: University of California Press, 1996); Richard Rhodes, *The Making of the Atomic Bomb* (New York: Simon and Schuster, 1986); Richard Rhodes, *Dark Sun: The Making of the Hydrogen Bomb* (New York: Simon and Schuster, 1995).

³¹ Len Ackland, *Making a Real Killing: Rocky Flats and the Nuclear West* (Albuquerque: University of New Mexico Press, 1999); Michelle Stenehjem Gerber’s *On the Home Front: The Cold War Legacy of the Hanford Nuclear Site* (Lincoln: University of Nebraska Press, 1992).

³² Ackland, *Making a Real Killing*, 249.

³³ Gerber, *On the Home Front*, 1-10.

studied without focusing too narrowly on health or environmental damage, or oversimplifying the complex set of opinions on nuclear projects that can characterize these communities. By investigating “the attitude and cultures of those who lived in the shadow of the bomb,” and focusing on “the interplay between family and secrecy, local community and federal laboratory, and atomic hope and nuclear fear,” Hunner was able to generate a much more interesting and informative study.³⁴

Many works have been written under the rubric of a developing historiography of the Nuclear West as a region. Building upon Gerald Nash’s studies of the West during World War II, Ferenc Morton Szasz and Patricia Limerick first addressed the concentration of nuclear facilities in the West during the mid 1980s and early 1990s.³⁵ In “The Significance of Hanford in American History,” Limerick incorporated the idea of a Nuclear West into the broader project of the New Western History. Limerick suggested that the nuclear age “did, in truth, inaugurate a whole new era in human history,” but also maintained that “in other ways, the story of Hanford makes a firm and close match with the basic configurations of western expansion.”³⁶ According to Limerick, “in daily life at Hanford, the historian can find the paradox of the Cold War embodied. The federal government undertook to suspend democracy and freedom in practice, in order to defend

³⁴ Hunner, *Inventing Los Alamos: The Growth of an Atomic Community* (Norman: University of Oklahoma Press, 2004), 8-9.

³⁵ Gerald Nash, *The American West Transformed: The Impact of the Second World War* (Bloomington: Indiana University Press, 1985); Gerald Nash, *World War Two and the West: Reshaping the Economy* (Lincoln: University of Nebraska Press, 1990); Ferenc Morton Szasz, *The Day the Sun Rose Twice: The Story of the Trinity Site Nuclear Explosion: July 16, 1945* (Albuquerque: University of New Mexico Press, 1984).

³⁶ Patricia Limerick, “The Significance of Hanford in American History,” in Paul W. Hirt, ed., *Terra Pacifica: People and Place in the Northwest States and Western Canada* (Pullman: Washington State University Press, 1998), 58.

democracy and freedom in theory.”³⁷ Since Limerick’s article was published, two other anthologies have been published that explore the definition and significance of the Nuclear West as a region.³⁸ These studies are a reminder that the history of the Nevada Test Site falls into a much broader history of how military spending has influenced the history of the western United States. They also speak to the relationship between federal and local power in the West, and to how both western history and the history of nuclear installations have often contained within them narratives of exploitation, environmental destruction, and abuse.³⁹

While the Nevada Test Site is often mentioned in histories of the Nuclear West, most studies of the Nevada Test Site have not been situated within this framework. Instead, the majority have focused on the issue of fallout from the nuclear tests, and the struggle for justice and compensation by individuals who were harmed by fallout from the test site.⁴⁰ A. Costandina Titus’ *Bombs in the Backyard* is perhaps the most useful of these studies. Focusing on testing both in the Pacific and within the United States, Titus devoted a considerable portion of her study to reactions to the tests in Las Vegas and other areas surrounding the test site. Titus sought to explain why the people of Nevada

³⁷ Limerick, “The Significance of Hanford in American History,” 64.

³⁸ Bruce Hevly and John M. Findlay, *The Atomic West* (Seattle: University of Washington Press, 1998), and Kevin J. Fernlund, *The Cold War American West, 1945-1989* (Albuquerque: University of New Mexico Press, 1998).

³⁹ Richard White, *It’s Your Misfortune and None of My Own: A New History of the American West* (Norman: University of Oklahoma Press, 1993).

⁴⁰ Philip L. Fradkin asserted in *Fallout, An American Nuclear Tragedy* (Tucson, University of Arizona Press, 1989) that “the mistakes and subsequent cover-ups” that followed dangerous tests “assumed the proportions of a major crime committed by the federal government against its most trusting citizens.” Howard Ball’s *Justice Downwind: America’s Atomic Testing Program in the 1950’s* (Oxford: Oxford University Press, 1986) takes a similar view, while Barton C. Hacker’s massive study, *Elements of Controversy: The Atomic Energy Commission and Radiation Safety In Nuclear Weapons Testing, 1947-1974* (Berkeley: University of California Press, 1994) sympathizes much more with the AEC and those responsible for the tests, and finds them innocent of any wrong doing or neglect.

accepted and even welcomed the tests for so long, and concluded that weapons-testing policy was “the result of a consistent pattern of government denial and public acquiescence.”⁴¹ According to Titus, the Atomic Energy Commission was able to “command public support” for atomic testing because the American people were “frightened by possible communist aggression . . . [and] receptive to almost any government action that they believed would preserve the democratic way of life,” even if the action “involved potential risks such as radioactive fallout.”⁴² Titus also pointed out that the AEC “assiduously worked to maintain popular support for testing through a full-scale public-relations campaign conducted nationwide, but of special significance to Nevadans.”⁴³ Finally, Titus attributed the AEC’s ability to carry on testing to “the relative lack of public knowledge about radioactivity.”⁴⁴ The research conducted for this study, then, can be carefully compared to Titus’ findings, to discover whether anti-communism and AEC propaganda did indeed play the roles that Titus concluded they did in determining community attitudes towards the test site.

Civil Defense Historiography

Several key works have assessed the importance and impact of civil defense programs during the Cold War. Growing out of World War II home front organizations, civil defense was, during the Cold War, a term that referred to any efforts that helped prepare Americans and the United States for atomic attack. Civil defense policies and programs were managed by the National Security Resources Board until the creation of

⁴¹ Titus, *Bombs in the Backyard*, xiv.

⁴² *Ibid.*, 145.

⁴³ *Ibid.*, 146.

⁴⁴ *Ibid.*, 146.

the Federal Civil Defense Administration (FCDA) in 1951. This organization was replaced by the Office of Defense and Civilian Mobilization in 1958. In 1961, President Kennedy placed control of civil defense programs in the hands of the Department of Defense, through the creation of its Office of Civil Defense. As this rapid succession of administrative changes suggests, civil defense policy became an important issue during the Cold War, with the American public frequently expressing concern over the government's handling of the issue.⁴⁵

Guy Oakes argued in *The Imaginary War* that the civil defense programs of the 1950s were an attempt to forge and sustain “the determination required to risk nuclear war and to form the resolve needed to underpin national security policy.”⁴⁶ In other words, Oakes argued that civil defense programs were a way to make the strategy of deterrence more acceptable to the American public, an objective that was accomplished through a program to control fears of an attack, make plausible and reassuring preparations for a post-attack America, and produce a “Cold War ethic.” This civic ethic, according to Oakes, was based on “the mythology of the home, the ultimate sanctuary of American values, re-conceptualized as the final redoubt in World War Three.”⁴⁷

In *Civil Defense Begins at Home*, Laura McEnaney echoed and built upon Oakes' findings, and further focused on civil defense planners' attention to the American family and home. Focusing on the institutional and social history of the Federal Civil Defense Administration, McEnaney outlined how the civil defense policies of the 1950s

⁴⁵ Laura McEnaney, *Civil Defense Begins at Home: Militarization Meets Everyday Life in the Fifties* (Princeton: Princeton University Press, 2000), 152-156.

⁴⁶ Guy Oakes, *The Imaginary War: Civil Defense and American Cold War Culture*, (Oxford: Oxford University Press, 1994), 8.

⁴⁷ *Ibid.*, 8.

“domesticated war and made military preparedness a family affair,” in order to reconcile the “euphoria of peace with the urgency of war,” that existed simultaneously in the post war period.⁴⁸ The results, according to McEnaney, were policies and programs that brought about a “fusion of military ethics and idealized domesticity,” and in effect, “the militarization of everyday life – especially family life.”⁴⁹

McEnaney’s and Oakes’ conclusions are similar to May’s and Nadel’s, in that they emphasized the tendency to focus on the home, both as refuge from the dangers of the Cold War, and as the primary battleground on which the Cold War was to be fought. These studies raised important questions about the focus of the Cold War civil defense planners on the home, but did not examine how this focus was perceived by its target audience, or what kind of effect it had on children and families. This study will examine how some children perceived and reacted to these messages.

The Historiography of Children During the Cold War

While all of the works discussed above help to inform and structure this study, they are useful primarily for understanding the contexts of children’s experiences. Efforts to study the Cold War experiences of children, of course, are more directly relevant. During the course of the Cold War, many parents and academics were concerned about the impact of fears about atomic attack and communism on children.⁵⁰ Historical analyses of children’s Cold War experiences, however, are relatively new. Certainly, many of the works already discussed made contributions in this area. While he

⁴⁸ McEnaney, *Civil Defense Begins at Home*, 4.

⁴⁹ *Ibid.*, 4-5.

⁵⁰ Sibylle K. Escalona, “Growing up with the Threat of Nuclear War,” *American Journal of Orthopsychiatry* 52 (October 1982), 600-607.

did not examine the Cold War experiences of children in depth, for example, Boyer did acknowledge that Americans had serious concerns about how the “horrors” of the atomic age would affect their children.⁵¹ Similarly, Elaine Tyler May devoted the final chapter of *Homeward Bound* to the children of the families she had studied. May focused on Betty Friedan’s *The Feminine Mystique*, which, according to May, explained how the “domestic containment” of the 1950s would soon fracture, “doomed from its own internal contradictions.” May suggested that “Friedan spoke for a generation whose children would later be credited with initiating a decade of political and social upheaval, but many of their parents had paved the way.”⁵² In other words, May concluded that children raised in the atmosphere of domestic containment could not help but to bring about its destruction, encouraged, in many cases, by their frustrated and dissatisfied parents.

Expanding on May’s ideas, scholars studying the Cold War experiences of children often seem to have been focused on discovering the roots of subsequent political and social upheaval. According to Peter Filene, many historians have been puzzled by the transition between the “quiescent” 1950s and turbulent 1960s, and have sought to “trace the roots of the sixties back into the apparently quiescent fifties,” and thereby minimize the change.⁵³ The work of Joanne Meyerowitz is a good example of this kind of effort.⁵⁴ According to Filene, however, “a better answer is to trace back not to ancestors but to the formative experiences of the dissidents themselves.” Using this form

⁵¹ Boyer, *By the Bomb’s Early Light*, 21.

⁵² May, *Homeward Bound*, 217.

⁵³ Peter Filene, “Cold War Culture Doesn’t Say It All,” in Peter Kuznick and James Gilbert, *Rethinking Cold War Culture*, 167.

⁵⁴ Joanne Meyerowitz, ed. *Not June Cleaver: Women and Gender in Postwar America, 1945-1960* (Philadelphia: Temple University Press, 1994). Meyerowitz’s anthology is also valuable for its inclusion of black, working class, and activist women, groups that had been ignored in earlier scholarship.

of life-course analysis, Filene suggests that the shifts can be explained by “linking historical events to people’s attitudes at successive phase of their lives.” According to this view, “cultural history takes place by delayed effect,” and the true impact of the early Cold War on American life was not felt until the next decade.⁵⁵

In “Bert the Turtle Meets Dr. Spock,” Daniel Gomes made an effort to make this type of connection, by analyzing the child care theories of Dr. Benjamin Spock. According to Gomes, Spock’s “child-centered” philosophy of child rearing “uniquely and appropriately addressed an array of Cold War anxieties, enabling parents to provide children with the emotional security and attributes necessary to function effectively in the shadow of the atom bomb.”⁵⁶ Gomes suggested that Spock’s permissive theories “reached deep into social and cultural fabric of American history, transforming not just childhood fears into hopes, but ultimately school-children into the next generation’s protesters and flower children,” whom Spock’s ideas had convinced that “their voices and actions, if not sufficient to ban the bomb and end the war, would at least make the world a better place.”⁵⁷ Gomes’ findings echo Filene’s suggestion that, for the generation that grew up in the 1950s, the emphasis on giving them security “impelled them not toward security but toward risk . . . the children felt safe enough to take the risks their parents shied away from.”⁵⁸

Not all historians, of course, have drawn the link between Cold War childhoods and 1960s protest in the same way. In *Awaiting Armageddon*, for example, Alice L.

⁵⁵ Filene, “Cold War Culture Doesn’t Say It All,” 167.

⁵⁶ Daniel Gomes, “Bert the Turtle Meets Doctor Spock: Parenting in Atomic Age America” in Scott and Geist, eds., *The Writing on the Cloud*, 11-19.

⁵⁷ Gomes, “Bert the Turtle Meets Doctor Spock,” 19

⁵⁸ Filene, “Cold War Culture Doesn’t Say It All,” 169.

George suggested that children facing and contemplating their own nuclear annihilation soon began to have “other unthinkable thoughts, such as the concept that adults might choose the wrong wars to fight.” George suggests that it was the “eruption of youth’s quiet doubts into the public arena” which brought about the “rebellion of one generation against another.”⁵⁹ While drawing the same conclusion as Gomes and Filene, George viewed the connection between childhood and 1960s protest as operating in a very different way.

Another approach to these issues was pioneered by Michael Scheibach in his study *Atomic Narratives and American Youth*. Scheibach focused on postwar adolescents, and examined their exposure to what he described as atomic narratives: narratives containing explicit or implied textual or visual images of the atomic bomb, atomic energy, or the atomic age.⁶⁰ Scheibach was one of the first scholars to build upon the work of Spencer Weart, extending his concept of nuclear images to explore nuclear narratives, and to assess their meaning and impact in broad terms. Examining the atomic narratives both directed at and produced by the first generation to grow up in the atomic age, Scheibach concluded that they were “inundated, even indoctrinated, with images and messages about [their] unique and consequential placement in history.” This led to “the creation of a social reality salient to this generation, and thus indirectly helped to cultivate a well-defined adolescent culture.”⁶¹ Emphasizing the variety of sometimes contradictory narratives to which adolescents were exposed, Scheibach suggests that the

⁵⁹ George, *Awaiting Armageddon: How Americans Faced the Cuban Missile Crisis* (Chapel Hill: University of North Carolina Press), 145.

⁶⁰ Michael Scheibach, *Atomic Narratives and American Youth: Coming of Age with the Atom, 1945-1955*, (Jefferson, North Carolina: McFarland and Co., 2004), 7.

⁶¹ *Ibid.*, 8.

“Atomic Generation became committed to attaining security *now*.” It achieved this goal by creating a distinct youth culture, largely based around high schools. This culture, and American youth’s increasing commitment to it, made the youth protest movements of the 1960s possible.⁶² While analyzing the experience of Cold War youth in a very different way, Scheibach concluded, like the scholars who preceded him, that the Cold War experiences of children may help to explain the social and political upheaval of the 1960s.⁶³

While most of the scholarship on Cold War childhood has focused on the roots of 1960s opposition, some of the most important studies of children during the Cold War have preceded this debate, or examined children’s experiences from a different perspective. Another area to attract scholarly attention has been children’s experience of civil defense. JoAnne Brown, for example, has studied civil defense in American public education, and found that educators “used civil defense, as they have often used topical ideas, as a political symbol to advance their more immediate professional concerns.”⁶⁴ As a result, very little meaningful change occurred, as “where dramatic practical changes seemed to occur, they often advanced old ideas; where new ideas arose, they often justified old practices.”⁶⁵ Brown did suggest, however, that while the bomb “had little overt effect on curriculum during the 1950s, changes came in the form of civil defense drills, new identification programs for children . . . [and] greater interest in child psychology.” Educators were careful, according to Brown, to avoid inspiring panic in

⁶² Ibid., 20-22.

⁶³ Ibid., 20-22.

⁶⁴ JoAnne Brown, “A is for Atom, B is for Bomb: Civil Defense in American Public Education, 1948-1963,” *Journal of American History* 75, no. 1 (June 1988): 69.

⁶⁵ Ibid., 72.

children through civil defense programs, and were concerned about long-term psychological damage.⁶⁶ More recently, Alice L. George has also analyzed children's perceptions of civil defense, and found that "while adults expected children to stop believing in the Easter Bunny at a certain age, they continued trying to sell the story of civil defense even when children had reached high school. Most children found no comfort in this fairy tale."⁶⁷

Christopher O'Brien's doctoral thesis, "And Everything Would be Done to Protect Us," is perhaps the only major work produced to date which seeks to analyze the Cold War experiences of children in more general terms. It is in many ways an attempt to duplicate, for the Cold War period, William Tuttle's study of children during World War II, *Daddy's Gone to War*.⁶⁸ O'Brien employed a similar research technique, by asking individuals who had grown up during the Cold War to write him their recollections, and using the resulting body of writing as his major primary source. O'Brien drew a number of important conclusions. Recognizing that the bomb "was the most identifiable aspect of the Cold War in children's lives," and that it "infiltrated their schoolbooks, their classrooms, [and] the movies they saw," O'Brien maintained that "American children . . . understood the linkage between nuclear weapons and the ongoing tension with the Soviet Union as symbiotic."⁶⁹ For O'Brien, children were "active, albeit often unwilling, participants in the long struggle between the United States and the Soviet

⁶⁶ Ibid., 77.

⁶⁷ George, *Awaiting Armageddon*, 156.

⁶⁸ William Tuttle, Jr., *Daddy's Gone to War: The Second World War in the Lives of America's Children* (New York: Oxford University Press, 1993).

⁶⁹ O'Brien, "And Everything Would be Done to Protect Us: The Cold War, the Bomb, and America's Children," Ph.D. Diss., University of Kansas, 2002, 3-4, 8.

Union.”⁷⁰ He rejected, however, the idea that these experiences can be linked to 1960s protest, and stated that children’s lives, “while profoundly influenced by those first few years, were not determined by them.”⁷¹ One of O’Brien’s more interesting conclusions is that children experienced much of the Cold War “in age-segregated classrooms,” and thus “tended to understand the experience as something they shared with age-mates” rather than with family members.⁷² This finding is an interesting counterpoint to the suggestions made by May, McEnaney, and others, that the culture of the Cold War was focused primarily on the home. Significantly, O’Brien found that most children felt that their homes were primary targets, and felt in very real terms that “they lived at the center of a nuclear bull’s eye.”⁷³

Existing work on how children experienced the Cold War has defined some of the questions that this study must explore. The question of whether childhood experiences of the Cold War played a role in the social and political upheaval of the 1960s, for example, is clearly an important one. In some ways, however, historians making these assertions have over-generalized the events of the 1960s, and assumed that an entire generation participated in 1960s rebellion, whereas in reality only a small portion of them did. The concept of 1960s rebellion as a single event or trend is, in itself, extremely problematic.⁷⁴ While the suggestion of links between Cold War childhood and subsequent protests is compelling, it has not yet been studied systematically. Scholars who agree that there is

⁷⁰ Ibid., 22.

⁷¹ Ibid., 336.

⁷² Ibid., 338.

⁷³ Ibid., 354

⁷⁴ David Farber, *The Age of Great Dreams: America in the 1960s* (New York: Hill and Wang, 1994); William Chafe, *The Unfinished Journey: America since World War Two* (New York: Oxford, 1991).

such a link have defined it and described it in very different ways, and explorations of these links have often risked obscuring some of the complexities and contradictions of Cold War childhood.

The works discussed above have also made some progress in exploring how the militarization of home and family life, or domestic containment, was actually experienced, but many questions remain unanswered about the impact of these trends on children, and about the extent to which these theoretical developments actually occurred within American homes, classrooms, and psyches. There is some evidence that, as O'Brien has suggested, children's experiences of the Cold War were focused on school, and not the home. This study will carefully examine the experiences of Las Vegas children in order to determine their exposure to ideas about the Cold War and the atomic bomb, both at home and at school, and will pay particular attention to signs of militarization and domestic containment in the home.

Sources

This study is based primarily on twelve oral history interviews, conducted in Las Vegas during the summer of 2005. In addition, three individuals who no longer lived in Las Vegas wrote responses to a questionnaire in lieu of being interviewed in person.⁷⁵ The sample of interviewees was predominantly white, with only one of the written responses, from Tillman Johnson, by an African-American. The entire group was composed of seven males and eight females. All but two were born between 1943 and

⁷⁵ These individuals were Tillman Johnson, Patrick Bailey, and Richard Vaughan. Because these written interactions were based on a question-and-answer format they were analyzed in much the same way as the interviews. For the sake of clarity, references to "interviews" and "interviewees" throughout this thesis should be taken to include these written sources as well.

1947. They were between four and eight years old when testing began. The only exceptions were Bill Shelton, who was born in 1937, and Ron Salmon, who was born in 1940. In general, the interviewees represented a variety of social classes. Some of them had very wealthy families, and parents who worked in the casino industry,⁷⁶ while others were working class, and had parents who worked as laborers, for the military, or as low-level casino employees.⁷⁷ Several of those interviewed were aware that their parents had had ties to organized crime.⁷⁸

Clearly, this sample of interviewees is too small and narrow to be able to draw firm or broad conclusions based solely on the interviews. Evidence from these interviews, however, particularly when combined with supporting documentary evidence, can still be used to suggest how children experienced and reacted to the nuclear tests and Cold War. These interviews are, at least, valuable as case studies of how some children were affected by their Cold War childhoods. While further research would be needed in order to determine whether their experiences were comparable to those of other children in Las Vegas, or to draw broad conclusions, this research suggests hypotheses and possible conclusions, and frames the questions which subsequent research should explore.

Oral history interviews, of course, were only one part of the research for this study. To supplement the interviews, archival and published sources were also consulted. At the Nevada State Archives in Carson City, the records of Nevada Governors Charles

⁷⁶ Laura Ungaro, interviewed by Timothy Cole, July 1, 2005, Las Vegas, Nevada.

⁷⁷ David McReynolds, interviewed by Timothy Cole, June 2, 2005, Las Vegas, Nevada; Ryan Barrett [Psued.], interviewed by Timothy Cole, June 20, 2005, Las Vegas, Nevada.

⁷⁸ Joyce Moore, interviewed by Timothy Cole, July 13, 2005, Las Vegas, Nevada.

Russell and Grant Sawyer, as well as the records of the Nevada Department of Education, contained a great deal of useful information. One of the most useful collections was the records of Irwin R. Crandall, Las Vegas and Clark County's Civil Defense Director for much of the period under study, at the Nevada State Museum and Historical Society in Las Vegas. Other useful collections and documents were found within the Department of Energy's Nuclear Testing Archive, and at the University of Nevada, Las Vegas' Nevada Test Site Oral History Program. The special collections of the University of Nevada, Reno, and the University of Nevada, Las Vegas also contained a wealth of information. In addition to these archival records, various published sources, including textbooks used in Nevada schools, the *Nevada Educational Bulletin*, the *Las Vegas Review Journal*, the *Las Vegas Sun*, and a collection of national periodicals and newspapers were consulted.

Methodology

The oral history interviews conducted for this study were carried out in a way that reflected, as closely as possible, the recommended approaches to this type of research.⁷⁹ The research was also required to conform to the strict guidelines set out by the University of Calgary's Conjoint Faculties Research Ethics Board.⁸⁰ The majority of the interviewees were initially contacted through the web-based alumni tracking service, classmates.com.⁸¹ Since Las Vegas had only one public and one Catholic high school for most of the period under study, this was an efficient way of contacting individuals who attended school in Las Vegas, and were in the correct age groups. Since only individuals

⁷⁹ The most commonly cited and used oral history manuals are: Donald A. Ritchie, *Doing Oral History: A Practical Guide*, 2nd Ed. (Oxford: Oxford University Press, 2003; Valerie Raleigh Yow, *Recording Oral History: A Practical Guide for Social Scientists* (Thousand Oaks, CA: Sage, 1994).

⁸⁰ See appendix for ethics review information.

⁸¹ Classmates Online, Inc., www.classmates.com.

who had signed up for the service were available to contact, however, the interviewees may have been selected out of a group of individuals who were already nostalgic about their education, and were seeking to keep in touch with old school friends. Not all of the interviewees were found in this manner. Others were contacted through an existing interviewee, or through contacts in the history department at the University of Nevada, Las Vegas.

The interviews themselves were conducted as open-ended conversations. While a list of questions was prepared, the interviews very seldom followed the format of the questionnaire. Interviews began by asking the interviewee some basic questions about their background, which were followed by very general questions about the interviewees' memories of their childhood, and their memories of the Cold War. Wherever necessary, these questions were followed up with more specific questions. Care was always taken to avoid asking leading questions, and to allow the interviewees to structure their own responses as much as possible.⁸² In general, each of the interviews lasted between ninety minutes and two hours.

The analysis of childhood memories that have been accessed through oral history interviews with adults presents some unique methodological problems. Such sources have been distorted and constructed in multiple ways; by the process of the interview, by the process of remembering, and by the interviewee's construction of a life narrative. Literature on the process of oral history, as well as both psychological and historical

⁸² Ritchie, *Doing Oral History*, 84-109.

literature on the nature and meaning of memory, has outlined some of these problems, and suggested ways of dealing with them.⁸³

The problems of using oral histories as historical evidence have been outlined very well by historians Paul Thompson and Alessandro Portelli. They have drawn attention to the nature of oral histories as narratives that are the product of interaction between the historian and the interviewee.⁸⁴ Emphasizing the role of the interviewer, they have encouraged historians to be mindful of their own part in framing the narratives which result from oral history. Thompson and Portelli have also studied the manner in which individuals construct and frame their memories, and emphasized the need to analyze the narrative that results in the context of the present, rather than regard it as a statement of historical fact.⁸⁵ Thus, what an interviewee “believes *might* have happened may be as crucial as what did happen.”⁸⁶ Portelli, in particular, has emphasized the importance of analyzing oral history interviews as narratives, and pointed out that the role of oral history is often “to connect life to times,” and produce “a tangible claim [for the interviewee] for having been in history.”⁸⁷ The interviews conducted for this study, then, must be analyzed with an awareness of their nature, as jointly constructed narratives that serve to bring meaning both to the past and to the present, rather than simply to recall past events. While this study certainly makes use of these analytical techniques and approaches, it also compares the interviews, and makes use of documentary evidence,

⁸³ Paul S. Thompson, *The Voice of the Past: Oral History*, 3rd ed. (Oxford: Oxford University Press, 1998); Alessandro Portelli, *The Battle of Valle Giulia: Oral History and the Art of Dialogue* (Madison: University of Wisconsin Press, 1997).

⁸⁴ Portelli, *The Battle of Valle Giulia*, 3.

⁸⁵ Paul S. Thompson, *The Voice of the Past*, 162.

⁸⁶ Ibid.

⁸⁷ Portelli, *The Battle of Valle Giulia*, 6-7.

which allows for some of the narratives produced through the interviews to be regarded as fairly reliable reflections of past events, or as common historical understandings in a present context.

The use of childhood recollections gathered through oral history is even more problematic. In addition to being distorted by the process of the interview and narrative construction, both historians and psychologists have found that childhood memories are among the most easily distorted of all.⁸⁸ Psychological literature can be particularly discouraging for the historian, since it documents many of the ways in which memory distortion can occur, as through False Memory Syndrome, or the much more common process of “life review.”⁸⁹ Historian Neil Sutherland has defended the usefulness of these childhood recollections by suggesting that certain aspects of childhood memory, such as those related to day-to-day life, or what Sutherland calls “scripts,” can still reliably be recalled.⁹⁰ In his article “When You Listen to the Winds of Childhood, How Much Can You Believe?” Sutherland argued that since children’s lives are usually highly structured and patterned, a great deal can still be learned from their recollections.⁹¹

An even more convincing argument for the continued usefulness of childhood recollections is that the question of whether or not the recollection reflects historical reality does not matter so much as the question of how it functions within the life narrative constructed by the interviewee. If the memory is meaningful to the individual, and serves to link a present self to a personal and collective past, then according to this

⁸⁸ Kevin M. McConkey and Steven Jay Lynn, eds., *Truth in Memory* (New York: Guilford Press, 1998), ix.

⁸⁹ Neil Sutherland, “When You Listen to the Winds of Childhood, How Much Can You Believe?” *Curriculum Inquiry* 22, no. 3 (1992): 241.

⁹⁰ *Ibid.*, 241-2.

⁹¹ *Ibid.*

view it forms a link between that individual and history, and is very much a valid subject for historical study.⁹² Several historians have also pointed out that there is little difference between a written memoir and an oral history of childhood, and that both are equally as constructed and unreliable.⁹³ While historians have every reason to be skeptical of adult recollections of childhood, they have also consistently defended the usefulness of such recollections, both for what they reveal about the past, and for what they reveal about individuals' relationships to it.

A final body of historiographical writing which relates to this research deals with the history of childhood. Building upon Phillipe Ariaès' classic study *Centuries of Childhood*, American historians have outlined some of the historiographical conventions and themes of the history of American childhood, which bear noting here.⁹⁴ While these scholars have been aware that childhood is in many ways a cultural construction, and made note of other studies that have treated childhood almost as a product to be consumed, they have also stressed that "being a child is to some extent a unique experience, never entirely synonymous with being an adult."⁹⁵ Elliot West and Paula Petrik have recognized that "children think differently from adults; they address the world around them in ways their elders find at least puzzling and sometimes

⁹² David Thelen, ed. *Memory and American History* (Bloomington: Indiana University Press, 1990), xv.

⁹³ Jay Mechling, "Oral Evidence and the History of American Children's Lives," *Journal of American History* 77, no. 2 (1987): 581.

⁹⁴ Phillipe Ariaès, *Centuries of Childhood* Trans. Robert Baldick (New York: Alfred A. Knopf, 1962),.

⁹⁵ See, for example, Daniel Thomas Cook, *The Commodification of Childhood: The Children's Clothing Industry and the Rise of the Child Consumer* (Durham: Duke University Press, 2004); N. Ray Hiner and Joseph M. Hawes, *Growing Up in America: Children in Historical Perspective* (Urbana: University of Illinois Press, 1985), xiv.

impenetrable.”⁹⁶ Historians must take care to account for the fundamental differences between children and adults, and to combine, as closely as possible, their knowledge of the past with a sense of how children viewed and experienced it. These scholars have argued that the perspectives of children in the past are extremely useful as alternative viewpoints to adult accounts. In his study of children in the West, for example, Elliot West suggested that “children perceive the world differently than adults do. And so, in a sense, the frontier that children knew was not that of their elders.”⁹⁷ This is not to say, however, that a child’s experience was in any sense more distorted than adult perceptions, or any less valuable to the historian, but rather to simply say that it was different.

Las Vegas in the 1950s

Prior to examining how Las Vegas children experienced and understood the nuclear tests, civil defense programs, and the Cold War era, it is important to note that the test site was not the only thing that made a childhood in Las Vegas different from those of other American children. Reporters covering reactions to the first few tests made it clear that they considered Las Vegas to be an unusual place for other reasons as well. In 1953, for example, a reporter from *Newsweek* sought to gauge the reaction of the community by speaking to two men whom many Americans would have thought of as icons of Las Vegas; a divorce lawyer, and a Las Vegas “hotel man.” During the 1940s, Las Vegas had established a reputation as “Hollywood in the desert,” and as America’s

⁹⁶ Elliot West and Paula Petrik, *Small Worlds: Children and Adolescents in America, 1850-1950* (Lawrence: University of Kansas Press, 1992), 4.

⁹⁷ Elliot West, *Growing Up With the Country: Childhood on the Far Western Frontier* (Albuquerque: University of New Mexico Press, 1989), zviii.

“Mecca of gamblers, divorcees, and elopers.”⁹⁸ It was a place where “the sunshine seem[ed] to be permanent . . . and breakfast [was] served 24 hours a day.”⁹⁹ Originally a Mormon settlement, then a mining and railway town, Vegas grew dramatically during the construction of Boulder Dam in the 1930s, and thanks to military spending during World War II. By 1950, however, tourism and gambling had become a mainstay of the Las Vegas economy, a change that was accompanied by the arrival of organized crime in the city. Beginning with “Bugsy” Siegel’s arrival in Las Vegas in 1941, and his control over the Flamingo, the mob exercised a great deal of control over Las Vegas and its gaming interests through the 1950s.¹⁰⁰

For children growing up in Las Vegas during the 1950s, gambling, the mafia, and run-ins with celebrities and tourists were all a part of their community’s identity and daily life. Carol Ross, for example, had fond memories of the day Elvis Presley stumbled into her father’s hardware store, while Ryan Barrett remembered swimming in hotel pools throughout the hot Las Vegas summers.¹⁰¹ Joyce Moore remembered going to shows in the hotels after prom nights at school, and reflected that “we just took it for granted that everybody went to see Dean Martin on Saturday night.”¹⁰² Many individuals who grew up in Las Vegas are very attached to their childhood home, where many of them found uncommon opportunities in the gambling and entertainment business. Laura Ungaro, for

⁹⁸ Samuel W. Mathews, “Nevada Learns to Live With the Atom,” *National Geographic* 103 (June 1953), 839-850; Daniel Lang, “Our Far-Flung Correspondents: Blackjack and Flashes,” *New Yorker* (September 20, 1952), 100-111

⁹⁹ Gladwin Hill, “Atomic Boom Town in the Desert,” *New York Times Magazine*, (February 11, 1951), 14.

¹⁰⁰ Moehring, *Resort City in the Sunbelt*, 47-49.

¹⁰¹ Carol Ross, interviewed by Timothy Cole, May 27, 2005, Las Vegas, Nevada; Ryan Barrett [Pseud.], interviewed by Timothy Cole, June 20, 2005, Las Vegas, Nevada.

¹⁰² Joyce Moore, interviewed by Timothy Cole, July 13, 2005, Las Vegas, Nevada.

example, stated that when she was growing up, “whatever you wanted to do, you could do in Vegas . . . if you want to work here, you can be anything you want to be.”¹⁰³

While Ungaro focused on Las Vegas as a land of opportunity, most who grew up there simply remembered their Vegas childhoods as carefree.¹⁰⁴ Others focused on the desert environment of Las Vegas, and have fond memories of hiking, biking, and fishing on the still undeveloped outskirts of their community.¹⁰⁵ While these are common sentiments that are often expressed when individuals recall their childhoods, they were particularly prominent in the memories of people interviewed for this study. In part, this is a reflection of the samples’ predominantly white, upper- and middle-class composition. The majority of those interviewed had stayed in Las Vegas, whereas individuals with more negative perceptions would have been more likely to leave later in their life. Given that Las Vegas was viewed as such a hedonistic city, however, it is important to note that most of those interviewed remembered feeling safe and secure during their childhood.

Not all childhood memories of Las Vegas during the 1950s, of course, have such positive implications. Ryan Barrett, who belonged to a less wealthy family, and whose father worked as a casino band member, made two very important points about the Vegas of his childhood in one statement, when he said, “The first black man I ever met was Sammy Davis Jr.”¹⁰⁶ A reference, again, to the presence of celebrity in Las Vegas, his statement also highlights the fact that Las Vegas was highly segregated for much of the 1940s and 1950s. Focusing on another less glamorous aspect of Las Vegas, Joyce

¹⁰³ Laura Ungaro, interviewed by Timothy Cole, July 1, 2005, Las Vegas, Nevada.

¹⁰⁴ Richard Vaughn, written response, August 2005.

¹⁰⁵ David McReynolds, interviewed by Timothy Cole, June 2, 2005, Las Vegas, Nevada.

¹⁰⁶ Ryan Barrett, interview.

Moore remembered her father's and her brothers' involvement with the mob. While, as a daughter of the family, she was protected from the world of her father's associates, she still has memories of her brothers and father conspiring to hide large amounts of money in their home, and had few illusions about their business dealings.¹⁰⁷ Individuals who grew up in Las Vegas were often very conscious of the influence of organized crime on their community, but did not always remember it as a negative. Carol Ross, for example, remembered feeling insulated from the racial conflict and protests of the late 1950s and 1960s, because, "Las Vegas felt very, very comfortable that it would not happen there. The casino owners -- people didn't want to come out and say the mob -- would not allow it to happen."¹⁰⁸

Organized crime, the gambling industry, tourism, celebrity, and rapid growth of their community were all things to which children living in Las Vegas were accustomed. To this list of things that made their childhoods exceptional, we must also add their experience of nuclear tests. It is interesting to note, however, that for the individuals interviewed for this study, the experience of testing was often the first thing they mention when asked what they remember as unique about growing up in Las Vegas. While this response may have resulted from their knowledge of the purpose of the interview, it is surely significant that even a person who had met Elvis in her early teens, or whose father was a Vegas mobster, used the test site as one way of framing and introducing the narratives of their childhoods, and the stories of their lives.

¹⁰⁷ Joyce Moore, interview.

¹⁰⁸ Carol Ross, interviewed by Timothy Cole, May 27, 2005, Las Vegas, Nevada.

CHAPTER TWO: CHILDREN ENCOUNTER THE TEST SITE

Most of those interviewed for this study were between four and eight years old when testing began, and between sixteen and twenty when above-ground tests ended. Their memories of the earliest tests were sometimes fragmentary, but were almost always very powerful. Whether experienced at home, at school, or in other contexts, nuclear tests left a lasting impression on some Las Vegas children. The interviewees often described their experiences in a way that seems strange or absurd in present contexts, whether because of the excitement and festive atmosphere that surrounded the early tests, or the calm, blasé attitude with which later tests were met. In order to make sense of these experiences and memories, it is important to understand their context. Children's experiences of the tests, of course, were heavily influenced by how their parents, teachers, and community presented them. Adult reactions to the tests, and the reactions of the community in general, can be gauged through an examination of various media sources. However they were prepared for the tests by adults, the individuals interviewed experienced the tests in a variety of ways. Their memories reflect the attitudes of adults in some cases, while in others they seem to be more a result of the raw experience of watching a nuclear bomb explode.

One of the most puzzling questions about Las Vegas' response to the tests is the lack of significant or sustained opposition. Even in the later 1950s, when opposition to nuclear testing was at its peak, very few voices of protest arose within Las Vegas. This makes it that much more important to examine the very few local protests that did occur, and to understand local reactions to them. Only then will it be possible to understand the ideological and political forces acting on children's experiences of the tests. From there,

the development of interviewee's opinions about the test site and nuclear issues can be traced over time.

Las Vegas Reacts to the Test Site

Las Vegas experienced its first atomic test on January 27, 1951. President Truman had announced the creation of the test site only a few weeks before, on January 11, and this had left Las Vegans very little time to get used to the idea. As a result, children and adults anticipated the first tests both with excitement and with some unease. By the time the first bomb was detonated, however, the community, or at least its elite, appears to have decided to support the tests. The *Las Vegas Review Journal*, for example, enthusiastically supported the test site from the beginning. On January 12, the headline, "Atomic Tourists Soon to Visit Vegas," promised economic benefit from the tests, while a second article, "Heck, We're Not Scared," quoted the mayor, a real estate agent, and even a blackjack dealer to indicate just how little Las Vegans were worried about the tests, and how excited they were, as the dealer put it, to be doing "something a little more important for the country than just paying taxes."¹ Stressing that "so far as Las Vegas is concerned, the citizens need have no fears that the explosions will affect them in any way," the *Review Journal* told readers that "a majority of citizens in this section have welcomed the AEC project with open arms." By suggesting that "the furor occasioned by the atomic energy commission announcement ... is entirely uncalled for," however, the paper acknowledged that there had been some concern about the impending tests.²

¹ "Heck, We're Not Scared!" *Las Vegas Review Journal*, January 12, 1951.

² "Not Dangerous," *Las Vegas Review Journal*, January 15, 1951.

When the testing actually began, it seemed as though the reactions of Las Vegas had been pre-determined by the rhetoric that had circulated beforehand. While the *Review Journal's* coverage of the first blast was published under the headline "Vegans Atomized," another headline on the same page read "Sky Light Up, Doors Slam – But Life Goes On." The paper sought to highlight the idea that it was business as usual by recounting an incident that had taken place at the Golden Nugget Casino. Apparently, "a man standing at one of the crap tables [had] felt the shock. He paused and looked around. 'Must be an A-bomb,' he said, then turned back to the table and went on with the game."³ According to the *Review Journal*, the majority of Las Vegas reacted to the tests calmly, and even with enthusiasm.

The efforts of the *Review Journal* itself, along with those of the Atomic Energy Commission (AEC) and local business elites, played important parts in causing Las Vegas to respond in this way. Throughout the 1950s, the AEC made efforts to reassure the public that the tests were not harmful. In the period before the first few tests, this was done mostly through press conferences and the local media.⁴ Later, the AEC took to addressing the public more directly by circulating several pamphlets throughout southern Nevada. *Atomic Tests in Nevada* was one such pamphlet.⁵ Produced in 1957, it presented an example of the AEC's reassurances throughout the 1950s. It began by telling residents: "You people who live near Nevada Test Site are in a very real sense active participants in the Nation's atomic test program," a program that had "contributed

³ "Vegans Atomized," *Las Vegas Review Journal*, January 28, 1951; "Sky Lights Up, Doors Slam – But Life Goes On," *Las Vegas Review Journal* Jan 28, 1951.

⁴ Eugene P. Moehring, *Resort City in the Sunbelt: Las Vegas 1930-1970* (Reno: University of Nevada Press), 98.

⁵ United States Atomic Energy Commission, *Atomic Tests in Nevada* (Washington D.C., 1957).

greatly to building the defences of our country and of the free world.” While admitting that “some of you have been inconvenienced by our test operations,” the pamphlet asserted, somewhat prescriptively, that “you have accepted them without fuss and without alarm,” and that “your best action is not to be worried about fallout.” The AEC sought to reassure Nevadans that “every test detonation in Nevada is carefully evaluated as to your safety before it is included in a schedule. Every phase of the operation is likewise studied from the safety viewpoint.”⁶

Just as important as the AEC’s efforts to assure Las Vegans that the tests were safe were the efforts of the Las Vegas Chamber of Commerce, which was printing literature as early as 1951 touting the “atomic cocktail” and “atomic hairdo,” as examples of Las Vegas’ new atomic cool. Often cited by historians as examples of Las Vegans’ enthusiasm for the test site, these were actually organized and deliberate efforts by Vegas’ business elite, meant to play down any fear of the tests. A Chamber official later admitted to a reporter that these efforts had been designed to “get people to think the explosions wouldn’t be anything more than a gag,” thus avoiding any negative impact for local businesses.⁷ As the coverage of the first tests by the *Review Journal* revealed, many of the statements that appeared in the local press during the early years of testing appear to have had this same goal in mind.

While the *Review Journal* clearly had its own perspective on the tests, reporters from outside Las Vegas also concluded that Las Vegans were supportive of the test site.

⁶ Ibid.

⁷ Daniel Lang, “Our Far Flung Correspondents: Blackjack and Flashes,” *The New Yorker*, September 20, 1952, 101.

The city was certainly in the public eye whenever tests were run, and full-spread, color photographs of the bomb explosions appeared regularly in the pages of *Life* magazine.⁸ A reporter from the *New Yorker* found that: “Despite all the rainless lightning and thunder the Las Vegans have been subjected to, it is possible to find among their other reactions a certain pride in their proximity to the proving ground.” He quoted a local divorce lawyer who said, “it annoys me to read about some statesman saying that the *world* is living with the atomic bomb. Damn it, it’s not the world. It’s Las Vegas.” Another Las Vegan told him that “before the proving ground, people just heard that this was a wide-open town. Now, that we’re next door to the atom bomb, they really believe it.”⁹ Clint Mosher, an International News Service (INS) reporter, wrote from Las Vegas in February about the things that “you glory in” while watching a nuclear explosion from Las Vegas. Top on his list was “these patriotic Las Vegans who risked the loss of their principal income, tourists, and never let out a peep of protest, nor showed the faintest trace of hysteria or panic . . . The attitude of the Las Vegans, living close to the sound and fury of the dragon, hit the jackpot for all of us.” Mosher described Las Vegans during a test as “People [who] were tense but outwardly calm, and very proud of themselves and their country.”¹⁰

The image that some Las Vegans projected to these reporters is an indication of their desire to seize upon the test site as another symbol of their community’s uniqueness. This type of reaction was encouraged in newspaper articles, advertisements, tourist literature, and in official pronouncements in which the test site and the atom bomb were

⁸ “A Bomb Test in Color,” *Life*, February 26, 1951, 48-9.

⁹ Lang, “Blackjack and Flashes,” 110.

¹⁰ Clint Mosher, “Watching Las Vegas Atomic Tests As Good as Trip to Psychiatrist,” *Las Vegas Review Journal*, February 14, 1951.

used as symbols of Las Vegas' promising future, and its importance to the nation.

Photographs of Las Vegas landmarks with a mushroom cloud in the background were widely circulated during the early 1950s, and such photographs were published in local and national publications or featured on popular Las Vegas postcards.¹¹ These images became symbols of the city's prosperity, and denied any suggestion of danger from the tests. Much of this effort, of course, was being expended to prevent tourists from being frightened away, and to raise Las Vegas' profile in the minds of the American public. Not all such attitudes, however, were economically motivated. Some of the more telling signs of identification with the atom were the use of a mushroom cloud on the Clark County seal and phone book throughout the 1950s.¹² That the seal would not have been something tourists saw very often, and that it remained in use throughout the 1950s, suggests that some Las Vegans took genuine pride in the test site, and wished their community to be identified with it.

It would be a major oversight, of course, to assume that the reactions of Las Vegans as they were portrayed in the press reflected their actual feelings, or that a variety of opinions on these issues did not exist. There is considerable evidence, in fact, that many Las Vegans would have disagreed with how their reactions were being portrayed in the papers. A January 31, 1951 article in the *Review Journal*, for example, referred to "a few civic rumblings," against the tests, but emphasized that "the beefs weren't serious."¹³ An interesting exchange of letters to the editor took place in the paper during October

¹¹ Costandina A. Titus, *Bombs in the Backyard: Atomic Testing and American Politics* (Reno: University of Nevada Press, 1986) 94.

¹² *Ibid.*, 94.

¹³ Bob Considine, "Land of the Hard-Way Eight Takes A-blast in its Stride," *Las Vegas Review Journal*, January 31, 1951.

1951, just after the first series of tests. It began with a letter from “H.W.,” who objected to a recent article that had “commended the courage of Las Vegans in taking the a-bomb explosions so bravely.” H.W. felt this to be “a laugh,” and asked, “what else can we do? . . . I for one object mightily to be being rudely awakened at dawn to find the doors rattling, house shaking, dogs barking. You may be assured I am not looking forward to doing my part at all.”¹⁴

A few days later “L.L.” responded, fuming that “H.W. is off his rocker, and anyway how dare he speak for the rest of Las Vegas. As far as I and most of the people I know are concerned, the tests are all right. We don’t mind a bit.” L.L. derided H.W. for being “nervous because he may be awakened at dawn by a blast. I bet it would make him a lot more nervous if he was awakened some dawn by a blast that centered on Fremont Street. Maybe the test will help prevent such a thing from happening.”¹⁵ A few days later, H.W. informed L.L. that:

I am not a guy but a gal . . . you remind me of the little boy whistling in the dark . . . Personally, I think a lot of this “hurray for the tests here” is a lot of show-off courage, like “what a brave man I am.” Now don’t write again that I am a crotchety old woman or a busybody old maid, as you would be wrong again. I am a housewife and a mother, not too bad looking and have lots of friends, so I am not particularly neurotic. Just peace loving. That’s me.¹⁶

The exchange between these two Las Vegas citizens is an indication of how clearly related many citizens felt the test site and the Cold War to be. For L.L. the test site was a way to prevent an atomic attack by Russia, while H.W. appears, in the end, to have objected to it because she was “peace loving.” The fact that H.W. called L.L. a

¹⁴ H.W., Letter to the Editor, *Las Vegas Review Journal*, Oct 13, 1951.

¹⁵ L.L., Letter to the Editor, *Las Vegas Review Journal*, Oct 16, 1951.

¹⁶ H.W., Letter to the Editor, *Las Vegas Review Journal*, Oct 23, 1951.

“little boy” and mocked his “show off” courage, presents the intriguing possibility that men and women reacted differently to the tests. Her response to L.L. even suggests that debates about the test site could be framed in terms of gender.

It seems clear that H.W. was not alone in her resistance to the tests. Certainly, many Las Vegans would have had cause for complaint. The shockwaves from atomic explosions broke windows and caused other damage in Las Vegas throughout the 1950s. One blast in November 1951 resulted in over 200 damage claims against the AEC.¹⁷ The impact of these damages on the community’s opinion about the test site was minimized, however, by a streamlined compensation program. Patrick Bailey remembered that the stucco on houses would often crack during a test, and that the next day “there would be a government guy going door to door . . . inspecting for such cracks and writing checks for the damage.”¹⁸

Despite scattered objections, sustained or large-scale public opposition to the tests simply did not occur in Las Vegas during the early 1950s. Citizens soon grew accustomed to the tests, and a general atmosphere of acceptance and even enthusiasm for the test site prevailed throughout the 1950s, thanks in part to the efforts of the AEC, the Chamber of Commerce, and local and national media. Test series were eagerly anticipated, and “shots,” as individual tests were known, were observed and reported on extensively.¹⁹ Each of them was given a distinctive name, like “Buster,” “Big Shot” and “Cue,” and the comings and goings of nuclear scientists staying at Las Vegas hotels was

¹⁷ Lang, “Blackjack and Flashes,” 107.

¹⁸ Patrick Bailey, written response, August 2005.

¹⁹ Lang, “Blackjack and Flashes,” 105.

carefully monitored for clues as to when the next detonation would take place.²⁰

Whenever a test was announced in advance, tourists and Las Vegans alike took trips to Mount Charleston, about halfway between Vegas and the test site, which offered an excellent vantage point for watching the detonations. Often, traffic up to Mount Charleston was “bumper to bumper, just like a ball game,” according to one gas station attendant along the route.²¹

Children and the Tests

During the period of initial curiosity and excitement about the test site, many parents felt that it was important for their children to witness the tests. One Las Vegas resident described a common scene in the very early morning on days when a test had been scheduled:

Some of us would come out on our porches with cups of coffee and wait there . . . Sometimes husbands would back their cars out of the garage and into the street to get a better view. They'd let the motor run until the car was warm, and then their families would come out and join them. I used to see parents pinching small children and playing games with them to keep them awake. I guess they wanted to be sure their kids would see history in the making. People all looked expectant, but in different ways. Some, you could see, were afraid. Others smiled and acted nonchalant.²²

Many of those interviewed for this study remembered similar scenes, and had memories of being awakened by their parents to watch a test. Carol Ross remembered “standing on the front porch with my mom and dad in the middle of the night, because they'd set the alarm to get up and watch the bombs go off.”²³ Similarly, Ron Salmon remembered that his father would “get us up in early in the morning [when] it was still

²⁰ Ibid.

²¹ Ibid., 107.

²² Ibid., 106.

²³ Carol Ross, interview by Timothy Cole, May 27, 2005, Las Vegas, Nevada.

dark outside . . . We would go outside, and I can remember wearing my pajamas out in the front yard.”²⁴ Bridget McKenna remembered being allowed to stay home from school to watch a test during the daytime, and recalled watching it with her family from their front lawn.²⁵ Gayle Brandt’s memories were more negative: “Whenever the tests were announced . . . my stepfather would get a big charge out of waking the whole family up and we’d sit out in the alley in lawn chairs and watch. It’s a very vivid, vivid memory for me.”²⁶ Brandt was afraid of her abusive stepfather, and reflected that, “It was exciting to him, so he made it exciting for us . . . He wanted to get up at four o’clock in the morning to watch a test, [so] we’d get up whether we wanted to or not.”²⁷

These memories make it clear that it was parents who woke children up, and attempted to make the event interesting for children. Interviewees usually described the experience as “exciting,” or “amazing,” and something that they “marveled at” as children.²⁸ This reaction is not surprising, however, given that children had been woken up and allowed to go out at an unusual time. Patrick Bailey, for example, remarked that “the most impressive thing about nuclear testing for me was having my mom wake me up about three a.m., just before a test.”²⁹ The fact that they were with their parents would, in most cases, have made children feel safe.

Most of those interviewed describe the experience of a test in similar ways. In particular, they remember the bright flash of light as the first sign of a detonation, and the

²⁴ Ron Salmon, interview by Timothy Cole, June 24, 2005, Las Vegas, Nevada.

²⁵ Bridget McKenna, interview by Timothy Cole, May 31, 2005, Las Vegas, Nevada.

²⁶ Gayle Brandt, Interview by Timothy Cole, June 28, 2005, Las Vegas, Nevada.

²⁷ Ibid.

²⁸ Bridget McKenna, interview; Jean Salmon, interview by Timothy Cole, June 24, 2005, Las Vegas, Nevada; Joyce Moore, interview by Timothy Cole, July 13, 2005, Las Vegas, Nevada.

²⁹ Patrick Bailey, written response.

extraordinary colors that the blasts produced. Joyce Moore, for example, remembered that “the whole sky would just get gold. You know, it would just light up, and it was a fun thing to do. It was like fireworks on the Fourth of July.”³⁰ Similarly, Gayle Brandt remembered that “We saw color. We saw the mushroom” and added that, “I believe that you can’t see something [like that] and not have it affect your whole being.” Like Moore, Brandt also remembered that watching test was like watching “a really spectacular Fourth of July exhibit. It was colorful. It was beautiful. It was bigger than life, and we were sixty miles away.”³¹ Patrick Bailey also remembered the bright colors of the blast, but reacted to them in a different way. He remembered that “the whole sky suddenly glowed the most terrifying shade of purple I’d ever seen . . . I hope I never see that particular shade of purple again.”³²

That children were so impressed by the color and beauty of the blast is a testament to how close they were to these extraordinarily powerful explosions. Their comparison of the event to a Fourth of July celebration, however, is as much a reference to the atmosphere in which they witnessed the tests as to the event itself. Watching the tests as a family, staying up late or waking up early, and seeing their entire community react in similar ways in a patriotic context, it is not surprising that children made this comparison. It is also, of course, a reflection of the national and community pride that many Las Vegans were encouraged to feel when watching a blast. Bailey’s statement,

³⁰ Joyce Moore, interview.

³¹ Gayle Brandt, interview.

³² Patrick Bailey, written response.

however, suggests that even in this context, some children still found the blast itself frightening.

Children were not always with their families when a test occurred. Some tests were carried out during the daytime, while children were at school. According to Loralie Schauss, “While I was in school we had to be prepared for test days . . . one wall of the classroom was almost all glass, and the impact of the bomb would shake things all over town. We would have to crawl under our desks and keep our heads down until it was over.”³³ Some individuals also remembered being instructed by their teachers to watch for radioactive clouds after a test. Bridget McKenna for example, remembered being told “what fallout was, what it looked like, and if you saw some, what to do.” When there was going to be a test, children were told to watch out for clouds of dust, and that if they should see one to “go away from it, and if you should happen to get caught in some, and it gets on you, you go home and tell your parents immediately, and you take a bath.” According to McKenna, these instructions were somewhat reassuring, because they gave her “the feeling that something could be done, and that something would be effective” if she got caught in fallout. While she “never heard of anybody actually seeing any,” she recalled that “it was kind of an exciting idea that there was this possibility of danger.”³⁴ Schauss’ and McKenna’s experiences suggest that children were more aware of the potential danger of the tests when they experienced them at school. Certainly, their teachers informed them of some of those dangers. At least in McKenna’s case, children

³³ Loralie Schauss, interview by Timothy Cole, July 5, 2005, Las Vegas, Nevada.

³⁴ Bridget McKenna, interview.

were also told that they would be safe, even though this assurance was based on the misguided perception that fallout would be visible.

Schools encouraged children to watch the tests, and to take pride in them. Joyce Moore remembered that “we talked about it in school, and our teachers would tell us: ‘There’s something going off in the morning . . . be sure to be up and be sure to watch.’ They all promoted it.”³⁵ Charlene Herst even remembered being taken in a school bus with her classmates to Mount Charleston to witness a nuclear test, presumably as part of a school field trip.³⁶

Interest in the explosions was often such that children were taken on such trips. Laura Ungaro, for example, remembered that she and her mother “used to pack picnic lunches” with friends and “go out to the test site and watch the bombs. I mean, it was sport.”³⁷ Similarly, Joyce Moore remembered that when she was about eleven years old, “my girlfriends and I used to ride our bikes to the foot of Sunrise Mountain, and we would climb to the top of Sunrise, and we’d sleep up there, and we’d wait . . . and we would watch” a bomb go off. Moore described watching the mushroom cloud as “amazing . . . we loved it.” She remembered that “we thought we were doing this noble thing, and our teachers told us that. We were told that in school.”³⁸

The closer they were to a test, the more aware of its dangers interviewees were. Bill Shelton, who was in his teens during the years of atmospheric testing, remembered watching a test from Angels Peak, where “we could look straight down into Yucca Flat

³⁵ Joyce Moore, interview.

³⁶ Charlene Herst, interview by Timothy Cole, June 13, 2005, Las Vegas, Nevada.

³⁷ Laura Ungaro, interview by Timothy Cole, July 2, 2005, Las Vegas, Nevada.

³⁸ Joyce Moore, interview.

and watch what was going on.” Shelton was at such close range that he remembered being unable to “keep your eyes open once the fireball ignites. And the amazing thing is that several seconds later you could feel, even though we were up at an altitude and there was still snow on the ground, you could still feel the warmth of the precursor going by you. It gave you a better sense of the tremendous power involved in one of those.”

According to Shelton: “That one test that I was able to witness from up on the mountain gave me a completely different feeling for the power of the weapon, and it was awe-inspiring.”³⁹ While experienced from his home, Ron Salmon’s description of a particularly powerful test is a similar example of how children could be surprised and impressed by the power of a nuclear explosion:

When an atomic bomb goes off the first thing you see is the light . . . You see the light first, and it's a very high intensity light. It's almost white, and it lasts maybe a minute. I was surprised how long it does last . . . I was ready to go back in the house. I thought that was it. Dad said, ‘No. Wait a minute.’ And then you'd hear the boom and you'd feel the concussion coming and the ground would shake, and for a twelve-year-old kid, that was pretty amazing, [that] all that would go [so far].⁴⁰

Salmon maintained, however, that he “couldn't imagine the destruction, and I don't think even today I can imagine the destruction of what an atomic bomb would do,” even after having witnessed the tests, and having “seen pictures of [Hiroshima and Nagasaki] Japan.” Salmon maintained that the test “didn't scare me. It was just an experience, but I must say I marvelled at it, and heaven help us if the world ever releases those things.”⁴¹ These types of experiences usually occurred at closer range to the tests,

³⁹ Bill Shelton, interview by Timothy Cole, July 7, 2005, Las Vegas, Nevada.

⁴⁰ Ron Salmon, interview.

⁴¹ Ibid.

and outside of the school or the home. The different types of memories that interviewees had of these experiences may also reflect the fact that they were older by the time they were allowed to approach a test so closely, or that the most powerful tests were held in later years.⁴² Children who experienced these more intense effects of the tests clearly felt it to be a humbling experience. Both Salmon and Shelton carried their new sense of the atomic bomb's power well into adulthood.

In time, of course, as both adults and children grew more used to the explosions, many of these initial impressions changed. For many of those interviewed, the tests simply became an ordinary part of their lives. Bridget McKenna, for example, remembered that the tests eventually became “part of our everyday reality -- the newspapers would cover when there was going to be a test, and then after a test there was some information about it on the radio and in the newspapers, and people would say ‘Oh, I heard that the blast broke some windows’ . . . [but] it was very everyday.”⁴³ David McReynolds remembered an occasion when he was about twelve, leaving in the early morning to go on a fishing trip. He was loading equipment into the dark trunk of the family car when “all of a sudden I could really see what I was doing, and I thought, ‘Wow. What’s going on?’ And then it faded after a few seconds. I realized, you know, an atom bomb blast just lit up the whole sky, enough so that I could see into the trunk of this car, and see what was going on in there.”⁴⁴ McReynolds described this experience as exciting, but also remembered that his stepfather, with whom he was going fishing,

⁴² United States Department of Energy, Nevada Operations Office, *United States Nuclear Tests: July 1945 through September 1992* (Las Vegas, NV: December 2000).

⁴³ Bridget McKenna, interview.

⁴⁴ David McReynolds, interview.

reacted quite calmly. The pair had not been expecting the test or woken up to observe it, and the event did not have the same significance that it would have had a few years earlier. Particularly after the first few years of testing, excitement over the tests had clearly diminished.

Based on the recollections of the interviewees, it seems clear that many Las Vegans welcomed the tests, as the media sources suggested. Most of those interviewed remembered being told by their parents and teachers that the test site was a positive development for Las Vegas, and something of which they should be proud. Children shared these feelings, reacting to what they were told by parents and teachers. Laura Ungaro, for example, did not remember “being fearful about it. It was all kind of exciting, because it was written in the newspapers. It was like a real big deal . . . not too many people were given press time with that that objected to it. I mean, you just didn’t object to it.”⁴⁵ Carol Ross remembered that her parents thought “it was a good thing because it would bring money into the community, with hiring people for the Atomic Energy Commission.” Ross also remembered thinking that “it made us unique, even more so than Las Vegas was already unique.”⁴⁶ Ron Salmon certainly felt, and continued to feel in 2005, that the test site was a good thing, “for the reason that it put a lot of people to work. It was good for the economy.”⁴⁷

While most of those interviewed remembered hearing only positive talk about the test site, Joyce Moore was one of the few who remembered being exposed to a negative

⁴⁵ Laura Ungaro, interview.

⁴⁶ Carol Ross, interview.

⁴⁷ Ron Salmon, interview.

perception of the tests. She recalled that “whatever negative input I got as far as the test site was concerned it was from my father. You know, he had a mouth on him so it was the ‘G.D. government’ and ‘What are they trying to prove? Don’t they know this isn’t the answer?’ So I got a negative input from him.” Even with this negative input, however, Moore still claimed to have felt as a child that the test site was a positive development for Las Vegas.⁴⁸

This pride in the test site was in large part tied to children’s understanding of its purpose. Most of those interviewed understood quite clearly that the test site was, as Ron Salmon put it, “For the defense of the country. That was definitely for the defense of the United States to be used in case of war.”⁴⁹ Gayle Brandt remembered thinking that the tests were being done “so we would have defences against evil Russia. The evil communists.”⁵⁰ Using nearly identical phrasing, Joyce Moore also remembered thinking that “what they were doing there was going to protect us from the evil Russians.”⁵¹ Laura Ungaro remembered having the distinct impression that, “This was definitely being done to make the world safe for democracy . . . this was being done to take care of the world.”⁵² These statements suggest that the test site’s importance to the arms race was something of which children were aware, and was another reason to feel proud of it.

⁴⁸ Joyce Moore, interview

⁴⁹ Ron Salmon, interview.

⁵⁰ Gayle Brandt, interview.

⁵¹ Joyce Moore, interview.

⁵² Laura Ungaro, interview.

Older children and youths seem to have been the most excited of anyone about their community's role in nuclear tests during the early 1950s.⁵³ The 1953 yearbook for Las Vegas High School, for example, made Las Vegas youth's identification with the atom bomb explicit. It featured a brightly colored illustration of a mushroom cloud on its front cover. The atom was the overriding theme of the yearbook, and the forward gave some idea of why the teens who had designed it felt it appropriate to identify their class with the atom bomb:

In the barren desert, we bloomed into versatility, writing our signature on the future with the power of Hoover Dam. Since then we have broken new boundaries. Expanding our horizons, we "just grewed," like Topsy. Now a jet streaks across the sky, faster than sound. An atom bomb explodes, louder than a thousand kettle drums [and] a lavish hotel shoots up, grander than a maharajah's palace, all awe-inspiring but magnificent.⁵⁴

Clearly, Las Vegas High School students viewed Las Vegas' relationship to the test site as an important part of their school's and their community's identities. The defense of their country and democracy was something that clearly weighed on the minds of these teens. The test site and Nellis Air Force Base were symbols of their community's important role in this effort, while Hoover Dam and the rapid growth of their city were proof of its frontier spirit.

Many Las Vegas children related to the test site simply as a place of employment for their parents and neighbours. Bill Shelton's father worked as a welder, constructing the towers on which some of the bombs were detonated.⁵⁵ Sometimes, children were

⁵³ In the context of this study, the term "youth" generally refers to teenagers of junior high and high school age.

⁵⁴ Las Vegas High School, *The Wildcat Echo*, 1953, 1. Ellipses included as a stylistic choice throughout this original quotation have been removed to avoid confusion.

⁵⁵ Bill Shelton, interview.

puzzled or intrigued by the secrecy that was required of test site workers. Bridget McKenna's brother-in-law, for example, worked at the test site. She remembered: "There was certainly a lot of secrecy . . . [He] told my sister there were certain things he could not tell her. . . . [and] On occasion he would come home and shower for long, long periods of time, put his clothes in a bag and tell her to throw them away without laundering them."⁵⁶ Similarly, David McReynolds had a neighbour who was a lieutenant colonel in the Air Force, and was "involved in something out there that he couldn't talk about." On one occasion, he invited neighbours over to look at slides of nuclear detonations. McReynolds remembered "asking him one or two questions, and he said, 'well, you know, there's a whole bank of scientists that are working on that question that you ask, and when they find out the answer, they're not going to tell us.' And so after a couple of questions like that I just looked at the slides."⁵⁷

Working at the test site was sometimes viewed as a symbol of status, and was certainly more lucrative than most available jobs. As they grew older, many of those interviewed were aware that "the best job that you could get . . . as a summer job would be if you could get on with something out at the test site, because they paid the most, and you could make a lot of money in the course of the summer as opposed to doing the normal kind of things that kids do over the summer."⁵⁸ Tillman Johnson remembered that "I knew a lot of people who worked at the test site . . . these were great jobs, [and] people made a lot of money."⁵⁹

⁵⁶ Bridget McKenna, interview.

⁵⁷ David McReynolds, interview.

⁵⁸ Ibid.

⁵⁹ Tillman Johnson, written response, August 2005.

Like adults, many children received instructions and assurances from the AEC. Pamphlets like *Atomic Tests in Nevada* were circulated throughout the 1950s, and some of these were distributed through the Las Vegas schools. In February 1955, for example, Las Vegas High School homerooms were given copies of a similar booklet, titled *Atomic Test Effects in the Nevada Test Site Region*. Teachers were told that “since the atomic bomb tests have again been started in Nevada, many people have wondered just why these tests are being made [and] what the effects are on us as individuals . . . Therefore, a booklet has been prepared by the Atomic Energy Commission to allay the fears which some people have concerning the atomic tests.” They were told to “Please encourage the students to take the books home,” for “parents to read, as a part of this educational program.”⁶⁰ This reference to fears and doubts about the tests is further evidence that many Las Vegasans were uncertain of how safe the tests were. Interestingly, in this case not only were children being reassured, but also used by the AEC and school system to help allay the fears of parents.

Rising Opposition

Despite the best efforts of the AEC, opposition to the test site grew during the mid-to-late 1950s. Atomic scientists, journalists, and anti-testing advocates drew increasing attention in the national press when they protested the ongoing tests, and warned of the health and environmental damage that they might be causing.⁶¹ It was not

⁶⁰ R. Guild Gray, Superintendent of Schools, to I.R. Crandall, Civil Defense Director, February 21, 1955, Las Vegas, File: Charlie Michaels Program, Clark County civil defense records, Las Vegas State Museum and Historical Society.

⁶¹ Robert A. Divine, *Blowing On the Wind: The Nuclear Test Ban Debate, 1954-1960* (Oxford: Oxford University Press, 1978).

long before some opposition began to appear within Nevada as well. In the first and most prominent cases, however, this opposition to the nuclear tests originated elsewhere.

Beginning around 1957, the efforts of the Non-Violent Action Against Nuclear Weapons Committee began to attract attention in Las Vegas. One group, whom the papers labelled “atom-lopers,” arrived in Las Vegas in August 1957. They attempted to enter the test site as a protest, and were arrested. A *Review Journal* editorial referred to the organization as a “cult.” While admitting that “it is quite evident that they are devout people and are following the tenets of their religion,” (many of the protesters were Quakers) it warned that “the committee will be looked upon in various quarters as religious fanatics, as publicity-seeking citizens, or even as downright reds . . . already there have been some rather shady characters trying to associate themselves with the group.”⁶² Remarkably, Hank Greenspun, publisher of the *Las Vegas Sun*, reminded readers in his “Where I Stand” column that the test had occurred on the twelfth anniversary of the bombing of Hiroshima. Recounting the destruction caused by that explosion, Greenspun suggested that “if sensitive, humane, and understanding men were making the decisions in our government, it would seem that this week, of all weeks, and if only for a week, would be the ideal time to call a moratorium on atomic tests to show the world that we are not completely unfeeling and there is some hope for peace.”⁶³ There is a sense of respect for the protesters in newspaper coverage, despite the fact that their actions were viewed as potentially subversive. Greenspun’s statement, in particular, suggests that by 1957 attitudes towards the test site were somewhat more flexible. While

⁶² “Mission Accomplished,” *Las Vegas Review Journal* August 7, 1957.

⁶³ Hank Greenspun, “Where I Stand,” *Las Vegas Sun*, August 7, 1957.

Las Vegas seem to have tolerated some outside opposition to the tests, they reserved the most hostility for voices of protest from within Nevada.

When local protests did appear, they were angrily dismissed by the local press. In 1955, State Senator E.C. Leutzinger of Eureka County asked his fellow legislators to support him in calling for a halt to the tests in Nevada. The *Las Vegas Sun* ran an editorial in response, a tirade against “another of our sterling members of the legislature [who] has made an ass of himself for all the world to see.” Asserting that “we have been as safe from atomic effects as if we were 10,000 miles away from the detonations,” the editorial lambasted “gossipy individuals” who “spread witches tales regarding atomic data they know nothing about,” and “succeed only in frightening old ladies and simple-minded citizens.” The paper concluded by asking rhetorically: “Who shall get out of Nevada, the AEC or the crackpot who makes such a suggestion in public?”⁶⁴

The *Review Journal* published a similar editorial, calling Senator Leutzinger a “loner” in his demand, “because a majority of the citizens of the state are proud that they have been able to play a part” in weapons development. The paper suggested that the senator “either has no pride in his state or he has been poorly advised, because there are few, if any, citizens who will back his demand.” In the article, the rationale for continued support of the test site was made clear. The *Review Journal* called for “more power to the AEC and its atomic detonations. We in Clark County, who are closest to the shots, aren’t even flickering an eyelid. We love the contribution to the nation’s safety and we

⁶⁴ “Another Humiliation,” *Las Vegas Sun*, February 18, 1955.

are happy with the attendant good publicity the state is receiving.”⁶⁵ Clark County’s civil defense director issued a statement that echoed the *Review Journal*’s stance. He assured Las Vegans that the AEC “know what they are doing, and Nevada will be the savior of the nation again in case atomic warfare breaks out, because of the tests held at Yucca and Frenchman’s flats.”⁶⁶ The developing opposition to the test site, and particularly any opposition from within Nevada, generated some of the strongest statements in support of the tests to be made in the Las Vegas press. Labelling opposing viewpoints as “simple minded” and portraying the tests as vital to national security, these statements illustrate the lack of tolerance for dissent within Las Vegas. Clearly, it would have been very difficult for most Las Vegans to publicly object to the tests.

Both papers followed protests elsewhere against the tests, which began in the late 1950s. In 1957 the *Review Journal* reported that police in Tokyo had had to fight off “100 enraged Japanese university students protest[ing] the Nevada Atomic Tests.”⁶⁷ Generally, the press simply mocked such protesters. In 1955, for example, the *Review Journal* noted that “every time we detonate a test A-bomb in Nevada, some of our friends abroad react with such anguish as to suggest their next day’s breakfast has been contaminated by the radioactive fallout.”⁶⁸ Eventually, however, the *Review Journal* was forced to acknowledge that “conflicting information about radioactive fallout from the Nevada atom bomb tests has alarmed the American public.”⁶⁹ While it continued to assure readers that the tests were safe, and even as it continued to mock critics of the test

⁶⁵ “Leutzing Loner,” *Las Vegas Review Journal*, February 18, 1955.

⁶⁶ “Crandall Rips into Solon for A-test Blooper,” *Las Vegas Review Journal*, February 20, 1955.

⁶⁷ “Japanese Students Rampage,” *Las Vegas Review Journal* March 29, 1957.

⁶⁸ “Banning the Nuclear,” *Las Vegas Review Journal*, March 23, 1955.

⁶⁹ Gordon Dunning, “Nevada A-Test Said Completely Harmless,” *Las Vegas Review Journal*, May 8, 1955.

site, the paper began publishing “fallout reports” from the morning’s detonation on the front page of the paper.⁷⁰ As opposition to the tests from outside Las Vegas grew, then, Las Vegas newspapers indicate that attitudes within Las Vegas were also changing, by paying increased attention to the potential dangers of the tests, and to rising outside opposition.

The newspapers also began printing stories about radiation damage that had occurred or had been narrowly averted during the tests, which suggests an increasing awareness of potential danger. In April 1953, for example, the *Sun* reported that the AEC had stopped vehicles in North Las Vegas that had been traveling through an area of fallout on their way to the city. A number of the vehicles were found to have enough radioactive dust on them to have “needed washing.”⁷¹ Similarly, the *Sun* reported in March 1955 that Eugene Haynes, a security guard at the test site, had been exposed to a radiation dose of 39 roentgens, “a higher exposure” than had been “experienced before by any worker” at the test site. Still, the paper insisted, “this amount is not expected to cause serious or permanent injury.”⁷²

Despite these signs of increasing concern, both papers continued to label any opposition to the tests as misguided and potentially subversive. When a test caused elevated radiation readings in Tonopah in 1957 and led to “a great deal of consternation” and “near panic,” the *Review Journal* reminded its readers that “the AEC scientists . . . have declared that the danger from fallout is almost negligible, so far as A-tests are

⁷⁰ *Las Vegas Review Journal*, *passim*.

⁷¹ “Mesquite Atomic Fallout Never Dangerous – AEC,” *Las Vegas Sun* April 27, 1953.

⁷² “Nevada Test Site Guard Gets Dose of Radiation,” *Las Vegas Review Journal*, March 6, 1955.

concerned.” It told them to accept the AEC’s reassurances and “quit listening to the voices of doom.” Such voices were “certainly giving ‘aid and comfort to the enemy,’ because if they frighten us off from development of atomic weapons, we may find ourselves in bad shape when the Russians start bombarding us with their[s].”⁷³

Conversely, the *Review Journal* reacted with pride in March 1955 when a cloud of fallout “wafted over Las Vegas and left radiation readings here that, while above the normal background level, were insignificant insofar as a person’s health is concerned.” The paper claimed that Las Vegans had reacted in a “matter of fact manner,” which the AEC had “praised.” The paper passed on the AEC’s compliments to Las Vegas, with the comment that “even much lower readings at more distant points have caused . . . public concern.”⁷⁴

As late as 1957, support for the test site was still strong enough for the *Review Journal* to encourage the placement of more nuclear projects in southern Nevada. In September, a *Review Journal* editorial praised Nevada Senator Alan Bible for suggesting that “if atomic reactors are being considered for any spots in the United States, Nevada should have priority.” The paper reminded the AEC:

There have been many occasions when the citizens of this state could have risen up and demanded that the AEC take their tests somewhere else, because of the so-called radioactive fallout. However, there has been no concerted movement on the part of citizens to do anything else but cooperate with the AEC. In practically every instance where there has been divergent points of view regarding the operation of the tests, the citizens of the southern part of the state have come to the defense of the AEC . . . Had the AEC been firing off their tests anywhere else . . . it is probable that the officials would have run into a bad time when the radioactive fallout debate reached its heights.⁷⁵

⁷³ “Fear is Awful,” *Las Vegas Review Journal*, May 30, 1957.

⁷⁴ “Fallout Hysteria Lacking in Vegas,” *Las Vegas Review Journal*, March 25, 1955.

⁷⁵ “A Sound Proposal,” *Las Vegas Review Journal*, Sept 3, 1957.

The paper obviously felt that Nevada deserved some recognition and reward for its support of the AEC. The suggestion that something was owed to Nevadans, however, is a clear sign that the paper realized how inconvenient and worrisome the tests had been. The idea that they could have given the AEC a “bad time” or “risen up,” for example, suggests that they would have had a basis for doing so, while the lack of “concerted” opposition does not deny the existence of some protests.

After November 1958, when the USSR and United States signed a moratorium on tests, fallout from the tests became less of a concern. The moratorium remained in effect until August 1961, when the Soviet tests resumed; more American tests followed soon after. When the Limited Test Ban Treaty was signed in 1963, testing in Nevada was moved permanently underground. Earlier underground tests had occurred, beginning in 1956. Once atmospheric tests were discontinued, however, there was a significant fall in protests against the test site, since the underlying issue of radioactive fallout was no longer a concern.

Despite feelings of unease and signs of developing local protest, sustained and organized opposition to the test site or other nuclear projects continued to originate primarily from outside the Las Vegas area well into the 1960s. As this analysis of the newspaper coverage has revealed, the climate of opinion within Las Vegas would simply not tolerate dissent on the test issue. While outside protesters were mocked or calmly criticized, anyone from Nevada who objected to the tests was ostracized, and viewed as providing aid to the Cold War enemy.

Retrospective Views and Long-Term Impact

Most of the individuals interviewed seemed to have absorbed their community's pride in the test site, and did not remember being exposed to very much negative talk about the tests. It seems clear that there were many reasons why Las Vegans would have supported the tests, and many reasons for those who opposed them to remain silent. While some of the individuals interviewed still felt in 2005 that the tests had been a benefit to their community, it is significant that most of them had developed a perception that the tests had been harmful in some way. This represents an important departure from what they were told, and remember thinking, as children.

Interestingly, each of the interviewees explained this break from their former views somewhat differently. For some, it occurred when they were still children. Carol Ross, for example, remembered that when she was about twelve, underground testing began, and "I started saying, 'That's not really smart because, granted the radiation isn't going to fall down on us, but couldn't one of those tests really trigger a major fault line?' And I would ask people that. I remember asking my history teacher that, and he just looked at me and said, 'Why would that happen?'" Ross remembered that she first began to question the safety of the tests when they moved underground, "because it was like, 'Okay, too many of you people are getting the clues here, and we're just going to do something different.'" She also believed that other people began questioning the logic of the AEC at the same time, although none of the other interviewees began to doubt the safety of the test site so early.⁷⁶

⁷⁶ Carol Ross, interview.

When asked what caused their opinions of the test site to change, most of the interviewees simply cited public revelations about health and environmental damage done by the tests, or the development of their own knowledge about the destructive potential of radiation. Bridget McKenna, for example, traced her change of opinion about the test site to her knowledge of how the tests had put “horrible things into the air,” which had caused people health damage.⁷⁷ She asked how the authorities “could not know that they were possibly causing people life threatening medical conditions,” with the tests, and connected this feeling to her opposition to nuclear projects, suggesting that “you end up with all this waste, and it has to be put somewhere, and so where do you put it? Well right where it can leak into the water table . . . it’s nuts.”⁷⁸

Several of the individuals interviewed were convinced, in 2005, that the tests had caused physical damage to themselves, to their family members, or to their friends. Gayle Brandt, for example, connected her long-term health problems to the tests, and remembered how “they [the AEC] said that it was far enough away not to be a threat, which to this day I do not believe . . . and I have a lot of basis for that. Young people that died of cancer very young. Anybody [that I knew] who worked out there is dead.”⁷⁹ Carol Ross pointed out that “We had two kids in high school that died of cancer out of about 700, which is a pretty high ratio,” while Bridget McKenna remembered that her mother had died of a cancer that “you got from exposure to radioactive iodine.”⁸⁰ In each of these cases, of course, significant medical evidence would be required to make a link

⁷⁷ Bridget McKenna, interview.

⁷⁸ Bridget McKenna, interview.

⁷⁹ Gayle Brandt, interview.

⁸⁰ Carol Ross, interview; Bridget McKenna, interview.

between the illness and the tests. Such a judgment is outside the scope of this study.

What is important, however, is that these interviewees believed that there had been a link between the tests and the deaths or illnesses of people they knew.

Once they came to believe that the tests had been unsafe, many of the interviewees were forced to conclude that they had been lied to, or at least misinformed. Carol Ross repeatedly emphasized that “nobody ever told us that it [the test site] was dangerous.” Much of her anger about the tests and her experience stemmed from this feeling of having been deceived.⁸¹ Joyce Moore said: “I know it’s a shock to everyone that our government lies . . . we have the best government in the world, but they’re still shady.”⁸² Clearly, the idea that they had been lied to made many of the interviewees angry, and made them distrustful of their government. Jean Salmon, for example, reflected that “It’s harder to trust. Our trust isn’t built anymore like it used to be. We used to have total trust in our government to take care of us, and when that is deteriorating it gets more difficult.”⁸³

Some individuals felt a retrospective sense of unease over the manner in which their community and family responded to the tests. Joyce Moore, for example, suggested that:

People were slow. People were slow here to get a grip on what was going on . . . It’s all about the bottom line. We bring more people in, more people go to work, we make more money, and we build more casinos. So if people have to die, ‘Oh well’. And of course, the government justified

⁸¹ Carol Ross, interview.

⁸² Joyce Moore, interview.

⁸³ Jean Salmon, interview. Ron and Jean Salmon were married. They were interviewed on the same day, but separately.

the whole thing that it's for world peace. We're never going to see that are we?⁸⁴

Moore even suggested that, as children, Las Vegans of her generation “were really suppressed. We didn’t ask questions about it. We weren’t involved in it, and if we did ask questions . . . [the response] was, ‘Is this bothering you? Then don’t worry about it.’”⁸⁵ Similarly, Loralie Schauss suggested that the people in her community “didn’t have enough brains to be concerned, ‘cause we thought they [the AEC] were going to keep us safe.”⁸⁶

Many of those interviewed, however, understood why the test site was welcomed and defended so enthusiastically. According to Carol Ross, it was:

an unspoken agreement with everybody, because 99 percent of the people that work in Las Vegas in one way or another are dependent on tourists. And if anything major would happen to keep the tourists away, then that would not be good, so unless it's something that they just absolutely cannot work around, they're not going to publish it. It all goes along with having no thermometers or clocks in casinos. You're just supposed to be in a different world.⁸⁷

Similarly, Bridget McKenna remarked that: “Perhaps I’m not as outraged as I should be . . . I think that at the time, you’re more wrapped up in what’s going on, and if you happen to be a naive society, you’re wrapped up a lot in what people tell you is true . . . I’m a little angry about it, but it took me a long time to get to that point.”⁸⁸

David McReynolds explained the lack of opposition to the tests in even simpler terms. He said, “I don’t think Las Vegas attracted people that were too worried about

⁸⁴ Joyce Moore, interview.

⁸⁵ Ibid.

⁸⁶ Loralie Schauss, interview.

⁸⁷ Carol Ross, interview.

⁸⁸ Bridget McKenna, interview.

anything” and stated his belief that “the kind of people that moved to Las Vegas are the kind of people that were looking for adventure. . . I don’t think a person that was too concerned about the kind of things that would cause them to maybe protest the test site . . . would move into an environment like that.” As a result, according to McReynolds, “if the government was going to pick a place where the people would be compliant or not worry about it or just try to profit from it where possible, that’s probably about as good a place as they could pick as any.”⁸⁹

For some individuals, these factors, along with the test site’s contribution to national defense, were still reason enough, in 2005, to rule out any misgivings about the test’s safety. The fact that the test site was a positive economic development for their city, along with the knowledge of the tests’ importance to national defense, is all the explanation they needed for their unique childhood experiences. Ron Salmon, for example, felt that the tests were well justified, and that they brought important jobs to the community.⁹⁰ Bill Shelton also said that important work took place at the test site, and maintained that the threat from the Soviet Union and communism made the tests necessary and important.⁹¹

In general, individuals who displayed the most distrust of the government, and were angry about their experience of the tests, seemed to be more opposed to nuclear weapons and waste projects in the present. The controversy over the Yucca Mountain radioactive waste storage project has drawn many of these issues out into political

⁸⁹ David McReynolds, interview.

⁹⁰ Ron Salmon, interview.

⁹¹ Bill Shelton, interview.

debates in southern Nevada, and nearly all of the interviewees living in the Las Vegas area had an opinion on the subject. Jean Salmon stated directly: “I’d just as soon Yucca Mountain didn’t happen.”⁹² Laura Ungaro was very opposed to the project, and believed it to be a serious health and environmental risk.⁹³

Even some of the individuals who continued to support the AEC and the government’s actions at the test site had their doubts about Yucca Mountain. Bill Shelton, for example, said “I don’t like the idea of Yucca Mountain being a repository for everyone else’s nuclear waste. I think it’s dangerous . . . I’m opposed to that usage of it.”⁹⁴ Conversely, Gayle Brandt, who felt that she was personally harmed by the test site, proclaimed that she was “one of the biggest advocates of Yucca Mountain you’ll ever find,” based on her perception that “we’re already contaminated to the max,” and that the Department of Energy had “done their homework,” on the safety of the facility.⁹⁵

Clearly, interviewees who harbored anger or resentment over their experiences of the tests do seem to have been more likely to oppose nuclear weapons or waste projects later in life. Interestingly, interviewees with similar political beliefs, of similar age, or of the same gender seem to be more likely to remember their experiences of the test site in a particular way, and to have had similar reactions to these experiences over the long term. As the statements quoted above suggest, more of the female interviewees had negative opinions about the tests than male interviewees. Many female interviewees also

⁹² Jean Salmon, interview.

⁹³ Laura Ungaro, interview.

⁹⁴ Bill Shelton, interview.

⁹⁵ Gayle Brandt, interview.

expressed some very liberal and left wing political perspectives during their interviews.⁹⁶ The two interviewees who were most supportive of the test site (Shelton and Salmon) were both male, and were older than the others. These two individuals also described themselves as conservative.⁹⁷ The other men who were interviewed generally had a softer stance on the test site, as well as on issues like Yucca Mountain, expressing neither the anger displayed by some of the female interviewees, nor the unequivocal support of the tests which Salmon and Shelton expressed. These individuals also either described themselves as liberal, or as mildly conservative, and expressed opinions that would place them somewhere in the middle of the political spectrum.⁹⁸

Individuals who reacted in similar ways to questions about Yucca Mountain and their support of the test site also often had similar memories of the tests. Both Shelton and Salmon, for example, had memories that focused on their experience of the power of the nuclear explosion, but focused very little on who they were with, or how they had felt about the experience at the time.⁹⁹ Many of the women interviewed, in contrast, had memories focused mostly on the atmosphere in which they had witnessed a test, and on how they had felt about it at the time.¹⁰⁰ The memories of individuals like Patrick Bailey and David McReynolds fall somewhere in between these two extremes. These

⁹⁶ Laura Ungaro, interview; Carol Ross, interview; Bridget McKenna, interview; Loralie Schauss, interview.

⁹⁷ Ron Salmon, interview; Bill Shelton, interview.

⁹⁸ David McReynolds, interview; Patrick Bailey, written response. When interviewees did not explicitly outline their political orientations, their incidental comments about issues such as taxation levels, social programs, current foreign policy, education, and immigration were used to place them on the political spectrum.

⁹⁹ Bill Shelton, interview; Ron Salmon, interview.

¹⁰⁰ Carol Ross, interview; Bridget McKenna, interview; Gayle Brandt, interview; Joyce Moore, interview; Laura Ungaro, interview.

interviewees, of course, are grouped together in very general terms. There is certainly enough correlation among their interviews, however, to suggest that individuals with similar backgrounds and political persuasions were more likely to remember their experiences of the tests in a particular way, and to have a particular view on nuclear issues at the time of their interview. This could suggest that their memories played a role in the development of their political views, or, conversely, that their memories were constructed to support them.

In some cases, childhood experiences of the tests did more than play a role in the development of an individual's nuclear politics. Some individuals felt that they had sustained permanent emotional damage from their experiences with the test site. Gayle Brandt, for example, remarked that:

I was very cynical as a young person, and I used to tell people we live in the best place ever, ever, ever, because We have the dam. We have Nellis Air Force Base. We have the Nevada Test Site. We have ammunition dumps. If there were ever an out-of-control war, we'd be the first to go. I know that sounds crazy, but it was very foremost in my thinking process as a kid, and I think it really developed who I became, because I didn't really have long-term goals until I hit my forties.¹⁰¹

¹⁰¹ Ibid

CHAPTER THREE: LEARNING TO DUCK AND COVER: CHILDREN AND CIVIL DEFENSE

As has been demonstrated, many Las Vegas children witnessed frequent and dramatic nuclear tests. Just as important to their experiences of the test site and nuclear bomb, however, were the efforts of their parents, teachers, and both local and national authorities to structure and control what children thought about the bomb. More often than not, these efforts were related to civil defense programs. The organization of a local civil defense council had begun just before the first tests, and the appointment of Irwin R. “Cy” Crandall as Clark County’s Civil Defense Director was announced on August 7, 1950.¹

In order to understand how Las Vegas children experienced civil defense, it will be important to understand how civil defense publications and programs were received and implemented in Las Vegas homes and schools. While they were designed and published at the federal level, it was up to local civil defense authorities to distribute these items, and left to parents, teachers, and school administrators to implement the programs they outlined. Civil defense programs targeted at the home often encouraged Americans to stockpile or to build shelters, while programs at school were based on civil defense drills. In Las Vegas, two community-wide identification tag programs were also established, largely aimed at children. Because they were specifically targeted at children, were normally only implemented in much larger cities than Las Vegas, and crossed over the boundaries that separated home, school, and community-based civil

¹“Announcement of I.R. Crandall’s Appointment,” 7 August 1950, Las Vegas, File: C., Misc, Clark County Civil Defense (CCCD) Records, Nevada State Museum and Historical Society, Las Vegas.

defense programs, they will be examined separately. Once the nature and extent of children's instruction in civil defense has been established, an examination of the interviewee's memories will suggest how children reacted to them, and what their long-term effects may have been.

Before these questions can be answered, however, the close links between local civil defense programs and the test site must be explored. Las Vegas was unusual, because it was often the location of direct cooperation between the Federal Civil Defense Administration (FCDA), the AEC, and the community. The level of cooperation was such that an AEC test manager was moved to remark in 1952 that "in this city we have found one of the finest, most completely organized civil defense groups that we have met in the United States, and the assistance from this group has been a great deal of help to us."² This unique situation had an important impact on the local civil defense organization, and on children's experiences of the Cold War.

Civil Defense and the Test Site

From the beginning, efforts were made to coordinate local civil defense initiatives with events at the test site. Beginning with Operation Big Shot in April 1952, for example, the Las Vegas civil defense committee organized regular trips for media and spectators to an observation point on Mount Charleston, nicknamed "News Nob" by the reporters who clustered there. Carroll Tyler, the AEC's test manager, wrote to Crandall after the test, thanking him for his help. "During the past few weeks," he wrote, "you have invited and transported at no cost to them over 500 persons to Mount Charleston to

² Carroll Tyler to I.R. Crandall, May 28, 1952, File: AEC letter, CCCD records.

view various detonations.” Tyler noted that these groups had included personnel from the fire department, nurses association, police, board of education, school principals, school teachers, and boy scouts from Las Vegas and Clark County, along with press and other individuals from outside the county.³ Cooperation between the civil defense council and the AEC had thus allowed some children, and many of their teachers and school administrators, to witness a blast at close range.

Operation Doorstep, in 1953, and Operation Cue, in 1955, were both highly publicized tests, and “gave many Americans their first glimpse of what an attack might look like.”⁴ Referred to as “open” shots, these tests were the result of cooperation between the FCDA and AEC, and were designed to test how various homes, vehicles, and bomb shelter designs would withstand an attack, as well as to give the American public a better understanding of an atomic bomb’s power. The Las Vegas civil defense community was involved in both tests, acting as a liaison between the FCDA, AEC, and the community in coordinating and caring for test spectators. The tests were also occasions for unprecedented spectacle and publicity. The *Las Vegas Review Journal* devoted pages of coverage to the March 17, 1953 blast, noting that “most Las Vegas were up and watching this morning, still interested in the visible effects of an exploding atomic device.”⁵ In the days that followed the tests, there was even more coverage, focusing in particular on the fate of the “Doom Town” that the FCDA had built to test the bomb’s effect on various houses, vehicles, and mannequins inside them. Headlines such

³ Ibid.

⁴ Laura McEnaney, *Civil Defense Begins at Home: Militarization Meets Everyday Life in the Fifties* (Princeton: Princeton University Press, 2000), 54.

⁵ “Vegans Rise Early for A-blast,” *Las Vegas Review Journal*, March 17, 1953.

as “Atomic Blast Wipes Out Doom Town,” were accompanied by FCDA chief Val Petersen’s statement that the experience of being in a foxhole two miles from the explosion had both convinced him to “get myself the best atomic shelter I can find,” and that “You certainly can be close to a bomb and not be hurt – If you know how to protect yourself.”⁶ The community’s role in hosting test site observers, and the joint civil FCDA-AEC tests, were clearly a source of pride, and generated a great deal of interest locally. The fuss around the “open” shots was such that Las Vegas children can hardly have escaped the news and publicity surrounding them.

The impact of the tests on children was of particular concern for local civil defense officials, and publications that helped children better understand tests and the atomic bomb were viewed as a way to alleviate such concerns. One of Crandall’s earliest priorities as civil defense director was the acquisition and distribution of such literature. Crandall wrote to the State Civil Defense Agency in April 1952, for example, asking for a number of copies of a civil defense manual titled *Interim Civil Defense Instructions for Schools and Colleges*, so that the measures and programs it outlined might be applied “while these tests are being run.”⁷ Similarly, a blood typing and identification tag program initiated by the civil defense council was coordinated to occur “at the same time as the Atomic Tests were being held at Frenchman’s Flat.” Concerned about the combined psychological impact of the tests and civil defense programs on children, local civil defense officials addressed a meeting of Las Vegas teachers, and

⁶ “Atomic Blast Wipes Out Doom Town,” *Las Vegas Review Journal*, March 18, 1953; “Civil Dense Chief Crouches in Foxhole,” *Las Vegas Review Journal*, March 18, 1953.

⁷ I.R. Crandall to C.A. Carlson, April 7, 1952, Las Vegas, File: CA Carlson, CCCD records.

advised them “what to tell the students in the various age groups regarding this blood typing program, the Atomic Bomb tests, and what to do for survival, with special emphasis that it might be presented in a matter to keep down panic.”⁸

It is interesting to note that while civil defense programs, films, and literature were viewed by local civil defense officials as a way to help children understand and deal with the tests, there was also concern that the civil defense programs would in themselves generate anxiety, fear, or panic in children. Certainly, ideas about the bomb, the test site, and the Cold War were viewed as being inter-related, and having a cumulative impact on children. It is significant, however, that Crandall initiated the meeting held to discuss these issues; it was not a response to the concerns of parents or teachers. Writing to the man whose company supplied the identification tags that children were issued in the 1951 tag program, Crandall expressed his goals for the civil defense programs for children: “We wanted them to feel that the atomic bomb did not mean the end of the world; that the children had security in the home, school, and community.”⁹

Civil Defense in the Home

Throughout the 1950s, federal civil defense planning and publications placed emphasis on the home as the primary focus of U.S. civil defense programs. As Laura McEnaney and Guy Oakes have suggested, this emphasis on the home was the easiest way to assure Americans that they would be safe, while minimizing the amount of government spending required to implement programs that the public would accept as

⁸ I.R. Crandall to Charles E. Petrie, September 5, 1951, Las Vegas, File: Charles Petrie, CCCD records.

⁹ Ibid.

plausible.¹⁰ The earliest civil defense publication to reach Las Vegas families was probably a 1950 booklet titled *Survival Under Atomic Attack*. Crandall's files are replete with letters to various printers and government agencies, attempting to procure or have printed ever larger batches of the publication for distribution in Las Vegas.¹¹ Reflecting its status as one of the first efforts to prevent Americans from worrying about the effects of an atomic attack, the primary message of *Survival Under Atomic Attack* was: "You can survive: You can live through an atom bomb raid, and you won't have to have a Geiger counter, protective clothing, or special training in order to do it."¹² The primary goal of the publication was to minimize fear and panic, and it encouraged Americans not to be "misled" by "loose talk of imaginary weapons a hundred or a thousand times as powerful."¹³ In order to dispel any feelings of helplessness, families were told that simple actions within the home, such as "fireproof housekeeping," would improve their chances of surviving an attack.¹⁴

Survival Under Atomic Attack contained a section titled "What about Children?" Parents were encouraged to "talk over the facts with all members of the family to be sure each understands," and "discuss the booklet with teachers and other parents at PTA meetings." It stated that while "children old enough to understand can be taught to do the

¹⁰ Guy Oakes, *The Imaginary War: Civil Defense and American Cold War Culture* (Oxford: Oxford University Press, 1994), 8.

¹¹ See, for example, I.R. Crandall to Superintendent of Documents, Washington D.C., January 9, 1951, Las Vegas, File: Atomic Literature, CCCD Records; IR Crandall to Col Arnold, March 9, 1951, Las Vegas, File: Col. Arnold, CCCD Records.

¹² *Survival Under Atomic Attack*, (Washington, DC: Executive Office of the President, National Security Resources Board Civil Defense Office, 1950), 3.

¹³ *Ibid.*, 4-5.

¹⁴ *Ibid.*, 14-19.

right things. . . younger children simply will have to depend on their parents.”¹⁵ The pamphlet thus acknowledged the special vulnerability of children, while also encouraging parents to make children a part of their family’s civil defense plans, and to teach children about the dangers of an atomic attack. Significantly, the publication also generated expectations that children’s safety would be well managed in schools, assuring parents that “in times of emergency, all schools will be well organized for the protection of children.”¹⁶

Throughout the 1950s, civil defense publications would emphasize the same basic messages of *Survival Under Atomic Attack*. Programs like *Home Protection Exercises* and the *Grandma’s Pantry* campaigns were widely distributed, and contained much the same information.¹⁷ There were so many campaigns of this type during the 1950s that it is difficult to know which ones were distributed in Las Vegas. Their basic messages, however, were quite uniform, and focused on the same home- and family-centered ideas of self help outlined in *Survival Under Atomic Attack*. Over time, however, the continuing arms race, and public revelations about the power of the hydrogen bomb required the FCDA to re-cast some of its programs. A new concept of evacuating target areas prior to an attack, for example, became one of the key policies the FCDA and the

¹⁵ Ibid., 30.

¹⁶ Ibid..

¹⁷ Federal Civil Defense Administration, *Home Protection Exercises* (Washington, D.C: United States Government Printing Office, 1956); Federal Civil Defense Administration, *By, For, and About Women in Civil Defense* (Washington, D.C: United States Government Printing Office, 1956).

Eisenhower administration after 1954. Beginning in that year, the FCDA began staging large-scale evacuation drills across the country as part of “Operation Alert.”¹⁸

The transition from the *Grandma’s Pantry* campaign to the *Grandma’s Pantry Goes on Wheels* variant exemplifies this change. The former focused on the need to stockpile food and emergency supplies in the home – as “grandma” had – and suggested that “a family probably would have to depend wholly upon its own food and resources for survival” after an atomic attack.¹⁹ *Grandma’s Pantry Goes on Wheels* told readers that “when Grandpa announced, ‘Pack up. We’re moving west,’ Grandma put a portion of her pantry on the wagon, and was ready.” In order to prepare themselves for evacuation, the pamphlet recommended that every family “keep a seven-day supply of food and water in their homes,” and a “three-day evacuation survival kit in the trunk of the family car.”²⁰

Planners had trouble making “Operation Alert” a success, however, due to the near impossibility of the task, aggravated by combined public resistance and public apathy.²¹ As a result, the idea of evacuating target areas fell out of favor quite quickly, a process which accelerated when the public began to realize that radioactive fallout could travel great distances. Continued public dissatisfaction with the FCDA’s shelter and

¹⁸ For detailed studies of Operation Alert, see McEnaney, *Civil Defense Begins at Home*; Guy Oakes, *The Imaginary War*; Dee Garrison, “Our Skirts Gave them Courage: The Civil Defense Protest Movement in New York City,” in Joanne Meyerowitz, ed., *Not June Cleaver: Women and Gender in Postwar America* (Philadelphia: Temple University Press, 1994).

¹⁹ Federal Civil Defense Administration, *Between You and Disaster* (Washington: United States Government Printing Office, 1956), 2.

²⁰ Federal Civil Defense Administration, *Between You and Disaster*; Federal Civil Defense Administration, *By, For, and About Women in Civil Defense* (Washington, D.C: United States Government Printing Office, 1956).

²¹ Garrison, “Our Skirts Gave Them Courage,” 201-221.

evacuation programs led to its replacement by the Office of Defense and Civilian Mobilization in 1958. Thereafter, a new, single-minded focus of planners on fallout shelters peaked in 1961, when President Kennedy caused a brief period of “shelter mania,” by prevailing upon Americans, in a letter published in *Life* magazine, to build shelters.²² By that time public understanding of radiation and fallout had grown to the point that most Americans were aware that a fallout shelter offered the only way of surviving an atomic attack. For a short time, a great deal of media attention, advertising, and debate was devoted to different ideas about fallout shelters, and a new concept of “shelter ethics.” This debate dealt with the ethics of sharing a personal shelter with neighbours, or refusing others access.²³ These arguments were particularly salient in Nevada, where civil defense officials and the public had long worried about managing a potential influx of Californians after a nuclear attack.²⁴

Interest in home shelters was widespread, and in 1961 the Office of the Mayor took the unusual step of printing a pamphlet that was distributed to homes in the greater Las Vegas area. Reflecting the new emphasis of national civil defense planners, it encouraged Las Vegans to build their own shelters. On the front of the pamphlet, Mayor Oran Gragson told residents that “our Civil Defense organization is here to help you in any community emergency, but Civil Defense is essentially **self-aid** when disaster strikes. You must know what to do and be prepared to act. Therefore, I urge all Las Vegans to study the following pages carefully. Let us identify the dangers, determine

²² President John F. Kennedy, “A Message from the President,” *Life*, Sept 7 1961.

²³ Kenneth D. Rose, *One Nation Underground: The Fallout Shelter in American Culture* (New York: New York University Press, 2001).

²⁴ J.T. Roberts to Governor Grant Sawyer, June 20, 1961, Las Vegas, File: Civil Defense, Militia Correspondence, Governor Grant Sawyer Records, Nevada State Library and Archives, Carson City, NV.

how best to meet them, then with confidence and faith meet the future.”²⁵ As in earlier publications, families were encouraged to “teach each member the action to [be] taken in the event of attack . . . [and] assign specific duties and hold family practice drills.”²⁶ Las Vegasans were also being informed, however, that while in a “community emergency” they could count on the help of local authorities, they were to be more or less on their own in a nuclear disaster.

Local authorities certainly encouraged families to build shelters, and made technical and practical advice on the matter available.²⁷ There were also advertisements in Las Vegas newspapers for fallout shelter materials and construction.²⁸ It is difficult to know how many Las Vegas families took the step of building a shelter, but the number appears to be quite small. While none of the individuals interviewed had shelters in their homes, it is significant that many of them remembered knowing someone who had built a shelter. Jean Salmon, for example, remembered that “if there was an attack . . . we had a place to go, ‘cause my cousin lived a block away with a bomb shelter underground,” and a year’s supply of food. She did not remember having thought about civil defense or shelters very much, however, or talking about it with other children. According to Salmon, it was something that “only adults talked about . . . they did things, you know, [to prepare for an attack] and of course we were aware of it,” but “we were just resilient

²⁵ Oran Gragson, “A Message to the People of Las Vegas,” in Greater Las Vegas Civil Defense Agency, *Recommended Family Plan*, (Las Vegas, NV: Greater Las Vegas Civil Defense Agency/Office of the Mayor, February 17, 1961), 1.

²⁶ Greater Las Vegas Civil Defense Agency, *Recommended Family Plan*, 3.

²⁷ *Ibid.*, 2.

²⁸ Carol Ross, interview; Gayle Brandt, interview.

to it, I guess.²⁹ Similarly, David McReynolds knew that his neighbours had gone “to the trouble of building a fallout shelter underground covered by . . . a good eight, ten feet of dirt,” but also added that “they were the only people that I personally knew that had done that, and my dad got around in Las Vegas.”³⁰

Certainly, most of those interviewed remembered receiving the kinds of messages discussed above. Gayle Brandt, for example, remembered her family receiving the pamphlets, seeing displays in stores, and being told to “keep the preparedness kits . . . I remember all of that really clear.” She also remembered, however, that “we didn’t live in an economically feasible area for people to even have the space or the funds to do that.” While clearly aware of the FCDA’s messages, Brandt’s family “didn’t stockpile – we didn’t do any of the things they said to do.”³¹ While they may have been aware of the recommendations of civil defense planners, then, many Las Vegas families were unwilling or unable to act on them.

The perceived need for fallout shelters, combined with the “self-help” emphasis of civil defense literature, did generate some concern on the part of Las Vegas families. In a city where few houses had basements, and where the cost of building a fallout shelter was expensive, some parents were driven to ask why shelters were not being provided for their families. In 1960, for example, Mrs. Harold Schultz wrote from Las Vegas to Nevada’s governor, asking why “nothing has been done to even begin to build any fallout shelters to protect the people of our state from this disaster.” Schultz was concerned

²⁹ Jean Salmon, interview by Timothy Cole, June 24, 2005, Las Vegas, Nevada.

³⁰ David McReynolds, interview.

³¹ Gayle Brandt, interview by Timothy Cole, June 28, 2005, Las Vegas, Nevada.

about the possibility of atomic attack, and sought to remind the governor that “Everyone cannot build a fall-out shelter for their family. They can’t afford it. How about the women who don’t have a husband to build one for her. Not everyone owns property. . . . I believe we have the right to that protection.” Schultz’s concern was mostly for families, and she stressed that “we love our children and we want to protect our children and ourselves so they might grow up healthy and happy. We also want them to know what a privilege it is to grow up in a free land.”³² Schultz’s statement reveals a frustration, not only with the lack of shelters, but also with the assumptions made by civil defense planners, that people lived as nuclear families, and owned homes. For Schultz, this appeared to imply that only families living in those situations were to be saved from atomic attack.

Similar concerns were in evidence at a women’s forum on Civil Defense, held by the *Las Vegas Sun* in 1961. The forum passed a number of resolutions calling for greater government action on civil defense, including that “adequate shelters be incorporated in all new schools to be built, and that they be stocked with food, water, and medical supplies,” and that “the existing schools lacking such facilities,” be retrofitted.³³ Like Mrs. Schultz, the women were concerned about “the present policy of placing responsibility for the building of fallout shelters upon the individual householder,” because it made “no provision for those who are financially unable to undertake such a burden, or who live in rented rooms, apartments, or homes, or in trailers, where such

³² Mrs. Charles M. Schultz to Governor Sawyer, Sept 15, 1960, Las Vegas, File: Civil Defense 1960, Governor Grant Sawyer Records.

³³ “Civil Defense Action Needed,” *Las Vegas Sun*, December 6, 1961.

construction usually is not feasible.” Their first resolution, therefore was “that the federal government take the leadership in establishing an urgent program of neighbourhood fallout-shelter construction,” and “that these facilities be available to all citizens regardless of economic status, race, creed, or national origin.”³⁴

The women at the *Sun* forum appear to have had two main grievances; the lack of shelter space, and the bias of civil defense planning and literature towards wealthy or middle class families, who owned their own homes and were usually portrayed as white.³⁵ Prior to the early 1960s, most Las Vegas families appear to have accepted the concept of civil defense, and the recommendations of civil defense planners, quite readily. Clearly, the shelter issue had brought the first widespread and organized protests. Often led by women, these protests usually focused on the fate of children without shelters, and the need to ensure their safety.

Civil Defense in Schools

At school, children were given a much more formal and structured education in civil defense than they received at home, and the individuals interviewed for this study had much more vivid memories of civil defense programs at school. Beginning with two FCDA manuals, *Interim Instructions for Civil Defense in Schools and Colleges*, and *Civil Defense in Schools*, Las Vegas teachers were instructed how to teach civil defense to children. Often, as Crandall’s letter asking for copies of *Interim Instructions* indicates, these materials were used in conjunction with tests at the test site.³⁶ According to these

³⁴ “Resolutions of Sun Women’s Forum on Preparedness,” December 5, 1961, Las Vegas, File: Civil Defense 1961, Governor Grant Sawyer Records.

³⁵ McEnaney, *Civil Defense Begins at Home*, 123-151..

³⁶ I.R. Crandall to C.A. Carlson, April 7, 1952, Las Vegas, File: CA Carlson, CCCD records.

manuals, the object of a school's civil defense program was to provide "instruction in self protection and self-help, both as an individual and a member of the group,"³⁷ and above all to "avoid developing hysteria, individual or mass."³⁸ These dual objectives were to be accomplished through the use of regular "civil defense drills in self-protection and self-help."³⁹ Generally, the drills focused on two attack scenarios. The first was for a nuclear attack with previous warning, and assumed the presence of emergency shelters in schools. To prepare for this scenario, students would be drilled on going to shelters "quietly and in orderly fashion" in the event of an alert, and "simple means should be devised for keeping children's minds occupied in the shelter to reduce fear and panic."⁴⁰ The second type of drill was recommended for the possibility of a sneak attack. This type of drill called for everyone to "drop to the floor immediately, taking cover under desks and tables and facing away from the windows," and for children to be "thoroughly instructed and drilled in this procedure so that 'ducking and covering' will be a reflex action."⁴¹

Civil Defense in Schools anticipated that such drills might cause parents to worry whether their children were being unduly frightened, and included suggestions on how to respond to these concerns. Parents were to be reminded, for example, that "all Americans hope for peace, but hope alone would make a poor shelter if war should come" and that "after all, we hope none of our children will be injured while crossing the

³⁷ Federal Civil Defense Administration, *Interim Civil Defense Instructions for Schools and Colleges* (Washington, D.C.: US Government Printing Office, August 1951), 1.

³⁸ *Ibid.*, 11.

³⁹ *Ibid.*, 2.

⁴⁰ Federal Civil Defense Administration, *Civil Defense In Schools* (Washington, D.C.: United States Government Printing Office, 1952), 10.

⁴¹ *Ibid.*, 10.

street, but still we give lessons in safety on the street. We hope that none of our schools will catch fire; nevertheless we hold fire drills.”⁴² It was anticipated that children would react calmly to the new drills, and parents were to be told that “the vast majority of them will accept these drills matter-of-factly as part of school routine. You can help to strengthen this feeling if you yourself accept them in the same spirit. Why not let your children teach you what they have learned in school about protection measures?”⁴³

There is only scattered evidence of how much attention was paid to these civil defense manuals in Las Vegas. Given that they were among the first civil defense instructions to be distributed to Las Vegas schools, however, it is likely that they would have been paid considerable attention, particularly when the first tests were being conducted. Certainly, the drills that these publications advocated were applied in many of schools. The fact that Nevada schools had real atomic explosions with which they could coordinate their drills even drew the attention of the national media. A 1952 article in *Colliers* magazine, for example, spotlighted “the story of our most atom-wise kids,” and featured a full page photograph of children at Indian Springs School lying on the ground of the schoolyard, their hands over their heads, with a mushroom cloud rising in the background.⁴⁴

Another FCDA project of the early 1950s had a more direct impact on children, and was the first civil defense publication to speak directly to them. Unleashed in December of 1952, and destined to become an enduring icon of the Cold War, Bert the

⁴² Ibid., 26.

⁴³ Ibid., 27.

⁴⁴ Robert Cahn, “A is for Atom,” *Colliers*, June 21, 1952, 15. Indian Springs is a small town located part-way between Las Vegas and the Test Site.

Turtle was a cartoon character created by the FCDA to teach children “a new game called ‘Duck and Cover.’”⁴⁵ Distributed as a comic book, a film, and a radio program, *Duck and Cover* was designed to teach children what to do in case of atomic attack, and as an instructional aid for civil defense drills. The film was regularly shown to classrooms and schools throughout Las Vegas and Clark County. It was also shown to high school audiences, a group that was clearly beyond the age range of the film’s targeted audience.⁴⁶ Unlike the publications discussed above, *Duck and Cover* attempted to express and describe civil defense in terms that children could understand.

The campaign portrayed Bert as a role model, because he knew how to “duck and cover” in his shell at the first sign of sign of danger. Children were told to emulate Bert by finding any kind of shelter they could, under furniture, behind walls and trees, or under their desks, and were told “remember – do it instantly . . . don’t stand and look. Duck and Cover!”⁴⁷ The film also allowed children to see what an atomic attack would look like. It focused on the flash as the best way to identify an attack, and described it as “brighter than the sun, brighter than anything you have ever seen” The film repeatedly stressed the danger of flying glass. While an actual explosion was not depicted, the flash of a bomb, as well as the wind and flying debris of an explosion, were either simulated or animated.

The *Duck and Cover* film was a particularly effective teaching instrument. A memorable song summarized the film’s message, and the film had animated portions,

⁴⁵ Federal Civil Defense Administration, “Press Release: Duck and Cover,” Dec 2, 1951, File: Education Division, CCCD records.

⁴⁶ Inventory as of July 29, 1953, File: Inventory, CCCD records.

⁴⁷ Federal Civil Defense Administration, *Bert the Turtle Says Duck and Cover*, (Washington, D.C.: United States Government Printing Office), 10-15.

featuring Bert, as well as live action portions, depicting children carrying out recommended actions in a simulated bomb attack. One of the most interesting aspects of *Duck and Cover* was its effort to educate and inspire children to action on the one hand, and to avoid frightening them on the other. Thus, children were reminded of other safety drills and precautions they had been taught, and told that “now, we must be ready for a new danger, the atomic bomb.” They were also told that “if you are not ready, and did not know what to do, it could hurt you in different ways. It could knock you down hard, or throw you against a tree or a wall. It is such a big explosion, it can smash in buildings and knock signboards over and break windows all over town. But if you duck and cover, like Bert, you’ll be much safer.”⁴⁸

As this passage makes clear, the *Duck and Cover* program gave children mixed messages. They were told of the danger that might befall them if they did not know what to do, but were only promised that they would be “safer” for knowing, rather than entirely safe. The drill was portrayed as a normal safety precaution, even as children were told that the bomb was a “new danger,” unlike anything they had seen. For children in Las Vegas, of course, the “bright flash” of the atomic bomb was quite likely something they had witnessed themselves.

The civil defense materials employed in Las Vegas schools suggest that emphasis was placed on finding a balance between keeping children safe from attack on one hand, and not frightening them on the other. At times, literature that attempted to do both at once may have seemed contradictory to children. Based on the recollections of the

⁴⁸ Federal Civil Defense Administration and Archer Productions Incorporated, *Duck and Cover* (New York: Archer Productions Incorporated, 1951).

interviewees, and on Crandall's records, it seems clear that civil defense programs in Las Vegas schools were limited to frequent duck and cover drills, and the occasional screening of a civil defense film. Interestingly, girls seem to have been more likely than boys to get civil defense training in school. The domestic slant of civil defense literature meant that it was often applied in home economics classes. Groups like the Boy Scouts were trained in civil defense first aid, however, suggesting that boys were also instructed in other civil defense programs, though in a different context.⁴⁹ This gendered division of labor persisted in civil defense literature throughout the 1950s, and was reflected in the civil defense training and tasks given to children.

Identification Tag Programs

Children who were older or particularly astute might have been forgiven for thinking that the drills would not do very much to protect them. Even as the drills were being instituted, local civil defense authorities mounted the first of two major campaigns to issue emergency identification tags. The program involved blood typing thousands of residents of Clark County, including all of the school children, and issuing each of them an identification tag. Over 15,000 tags were issued between January and September 1951, the majority of them to children.⁵⁰ In 1955, a second, national tagging program was launched in Las Vegas, in conjunction with one of the "open" tests. Programs of this

⁴⁹ "Boy Scouts" October 25, 1952, File: Films Taken Out, CCCD Records.

⁵⁰ The Federal Census of 1950 had indicated that the population of Las Vegas was just under 35,000, while Clark County had a population just under 50,000. The number of children under nineteen living in Las Vegas was just over 7,000. These numbers, combined with the program's emphasis on blood typing school children, suggest that most of those 7,000 children were issued tags during the course of 1951. (I.R. Crandall to Charles E. Petrie, September 5, 1951, Las Vegas, File: Charles Petrie, CCCD records; United States Bureau of the Census, *Number of Inhabitants*, 1950, 28-6; United States Bureau of the Census, *Characteristics of the Population, Part 28: Nevada*, 1950, 28-27.

type were quite rare, and were usually undertaken only in larger cities, like Los Angeles and New York.⁵¹

While encouraged by FCDA policy bulletins, the first blood typing program was largely a local initiative.⁵² Interestingly, it seems to have developed to serve several purposes at once, and was referred to both as a “walking blood bank” and as a civil defense identification program.⁵³ The minutes of the Clark County Civil Defense Council offer some insight into the rationale for the program. In part, the tagging campaign was undertaken due to the “tremendous amount of blood that would be needed” in an atomic bomb attack, and because of “the size of our population and our location being high on the priority list” of potential targets for atomic attack.⁵⁴ If the primary purpose of the program was to develop an emergency blood bank, however, it would not have made sense to focus on typing children, who were typed only as potential recipients, and were the first and primary group targeted by the program.⁵⁵ The evidence that the tags’ primary purpose was the identification of bodies and the reuniting of family members after an attack is, in general, much more convincing. Federal instructions for identification tag programs, for example, stressed that they should be made of materials with “a high melting point and slow oxidation at high temperatures.”⁵⁶

⁵¹ “25-Cent ‘Dog Tags’ Offered to Public,” *New York Times*, September 19, 1955; “School Children Get Identification Tags,” *New York Times*, October 19, 1951; “School Children May Wear Identity Tags,” *Los Angeles Times*, July 10, 1954; “Identification Project,” *Los Angeles Times*, March 4, 1962.

⁵² Federal Civil Defense Administration, “Distribution of Official Civil Defense Identification Tags,” *Advisory Bulletin* 181, Supplement 1.

⁵³ Minutes of the Clark County Civilian Defense Council Meeting, August 10, 1950, Las Vegas, File: Civil Defense Minutes, CCCD Records.

⁵⁴ Minutes, October 11, 1950, CCCD records.

⁵⁵ Walter D. Johnson, “Notice to Parents,” Las Vegas, File: Blood Typing Program, CCCD Records.

⁵⁶ Federal Civil Defense Administration, *Civil Defense News* 1 no. 22, (Oct 25, 1951).

Publicity surrounding the program was often ambiguous or silent as to its possible purposes, and was carefully managed to avoid causing alarm. On blood typing forms for adults, for example, the phrase “will you donate blood for Civilian Defense?” was replaced by “will you donate blood for Civilian Emergency?”⁵⁷ This seemingly minor change was probably meant to dissociate the program from the idea of an atomic attack, and to suggest images of floods, fires, and earthquakes instead. A statement written by Crandall, and printed on the envelopes in which the tags were shipped, displays similarly delicate and carefully constructed phrasing, by making reference to his organization’s “responsibility of safeguarding all civilians in the event of a national emergency. Of primary importance to this program is the welfare of our children, and to help in that respect proper identification of a child at all times is very desirable.”⁵⁸

It seems unlikely, however, that Las Vegas residents, and indeed many children, would not have realized that the tags were being produced for identification and treatment in the case of death and disaster, and particularly in the case of atomic attack. It is difficult to imagine the “national emergency” to be anything other than a nuclear war, and Crandall’s use of this phrase certainly undermined the notion of the tags as being intended for local disasters. His reference to the identification of children “at all times,” was likely meant to avoid suggesting that the tags were meant to identify the dead. Neither, however, does this phrasing deny that the tags were suitable for this purpose. Finally, Crandall suggested that “since our community is so closely associated

⁵⁷ Minutes of the Civil Defense Medical Committee, January 23, 1951, Las Vegas, File: Civil Defense Minutes, CCCD Records.

⁵⁸ I.R. Crandall, tag envelope, File: Charlie Michaels, CCCD records.

with our country's defense program," the local office of Civil Defense hoped parents would "encourage your child to wear" the tag.⁵⁹ A veiled reference to the role of the test site and Nellis Air Force Base as nuclear targets, this statement leaves little doubt as the tag's primary purpose. The tags were much like the "dog tags" worn by armed forces personnel during World War II, which had primarily been used for identifying bodies, and the use of the same term for the civil defense tags suggests an awareness that the tags could be used for this purpose. The mixed messages as to the campaign's purpose were exemplified by the envelope and card mailed out as part of the program, which featured a small graphic of a mushroom cloud rising over a city in flames along with the words "If disaster strikes . . . this tag may save your life!"⁶⁰

Among communities that implemented tagging programs, Las Vegas was unusual in that opposition to the program was minimal. Charles Petrie, whose company manufactured the tags for various communities, wrote to Crandall in July of 1951, asking about "the reaction of the parents, when they were notified that tags were available for their children," and whether "the program caused any alarm or panic with either the parents or children."⁶¹ Petrie was apparently hoping that Crandall's response might help his company and other local defense councils in dealing with "complaints from small groups within School Boards and Parent Teacher Associations who fail to see the necessity of such tags."

⁵⁹ Ibid.

⁶⁰ "If Disaster Strikes," File: Charles E Petrie, CCCD records.

⁶¹ Charles E. Petrie to I.R. Crandall, July 25 1951, File: Charles Petrie, CCCD records.

Petrie said that his experiences in other communities had shown that “Even though 90% of the people may want their children to be properly identified, the other 10% began calling the schools to question the recommendation of the defense council for coordinating such a tag program.”⁶² Among the concerns raised by such groups were fears that it would cause “panic and fear amongst the children and parents; that the tags would be lost or misplaced; that the tags would be traded with other children, (and) that it creates war hysteria.”⁶³ Angrily, Petrie suggested that “the principal opponents against identification tags seem to come from minority groups who, in some cases, would sabotage any defense effort no matter how it be for the community.”⁶⁴

Crandall’s response to this letter, written in September of 1951, suggests that responses in Las Vegas were quite different. In Las Vegas, according to Crandall, parents and schools had displayed “splendid cooperation,” with the program. Only two complaints had made their way to Crandall.⁶⁵ It seems, in fact, that the civil defense council was more concerned than parents about the program’s effect on children, as it initiated the meeting of civil defense officials and teachers described earlier.⁶⁶

One of the two complaints about the blood typing program that Crandall did receive was from Mrs. Virginia Dane, of North Las Vegas. Reacting to a notice sent home with children from schools, asking for a fifty cent payment for the cost of the tag, she replied: “Maybe we are being very stubborn, but we do not care to have the dog tag made for Timmy. Not only do we hope and trust it will never be necessary to use them,

⁶² Ibid.

⁶³ Ibid.

⁶⁴ Ibid.

⁶⁵ I.R. Crandall to Charles E. Petrie, September 5, 1951, Las Vegas, File: Charles Petrie, CCCD records.

⁶⁶ Ibid.

we also feel it is slightly high pressure to suddenly ask the parents to send fifty cents. That is a good deal for every school child to furnish.”⁶⁷ While Dane’s complaint was partly one of cost, she also voiced the type of concern that Petrie and civil defense officials sought to avoid. By objecting to the idea that the child needed the tag, Dane was rejecting the idea that a nuclear attack was likely to occur, or that the child could be seriously injured. At the very least, she was rejecting the idea that parents should consider and prepare for these events. It is surprising that only one or two parents in Las Vegas expressed this type of concern, given that Petrie had apparently encountered so much opposition to similar programs in other communities.

While the first identification tag program was repeated in subsequent years, orders for more tags became increasingly sparse.⁶⁸ By 1953, the program appeared to have lapsed.⁶⁹ It was not long, however, before a new program replaced it. Reflecting some important changes in attitude, the second program was designed and handled differently. The buzz surrounding Operation Cue in 1955 was accompanied by the announcement of a nation-wide dog tagging program for children, funded by the Pet Milk Company, and approved by the FCDA. Because of the high concentration of reporters in Las Vegas during Operation Cue, Las Vegas was chosen as the location for the launching of this campaign. The elaborately planned and staged event was coordinated between Clark County civil defense officials, the Pet Milk Company, and the FCDA, and presents an

⁶⁷ Mrs. Virginia Dane, letter, April 1951, File: Blood Typing Program, CCCD records.

⁶⁸ “Aid Civil Defense,” *Las Vegas Review Journal*, April 17, 1952.

⁶⁹ I.R. Crandall, Letters returning tag applications, File: Civil Defense Correspondence, CCCD records.

opportunity to observe the ideals and images these organizations hoped to publicize about children, civil defense, and the bomb.

A press release, signed by Crandall, was drafted on behalf of “four youngsters interested in the coming Atomic test here in Las Vegas,” and suggested that “what they have to say is of vital importance to every other youngster in America, and the Civil Defense Administration believes [that] these Las Vegas school students can get the message across to the rest of the country far more effectively than an adult. On behalf of four serious-minded American children, I urge you to listen.”⁷⁰

The press conference announcing the tag program was held on the lawn of Las Vegas High School, and featured FCDA administrator Val Peterson’s arrival in a helicopter.⁷¹ Entertainer Danny Thomas, who was performing at the Sands Hotel, co-hosted the press conference with Petersen. The guests of honor, however, were six Las Vegas children, who announced the new tag program themselves. Representing a range of ages, from four to seventeen, the children were three girls and three boys, but all of them, notably, were white. Four classes of students were issued their tags as part of the ceremony. The rest of Las Vegas children followed shortly thereafter.⁷² The *Las Vegas Sun*’s coverage of the event showed four-year-old Antoinette Wright, surrounded by the others, speaking into a very low bank of microphones. While each of the children made a statement before a “battery of TV and newsreel cameras,” the *Sun* chose to quote Wright: “When I grow up like mummy and daddy I may get hurt by an atomic bomb . .

⁷⁰ Freeman Public Relations Company, “Suggested Telegram from Cy Crandall and CD to Press,” File: FCDA Charlie Michaels Program, CCCD records.

⁷¹ R. Guild Gray to I.R. Crandall, April 18, 1955, Las Vegas, File: Civil Defense FCDA, CCCD records; C.D. Baker to I.R. Crandall, April 18, 1955, Las Vegas, File: Civil Defense FCDA, CCCD records.

⁷² State Civil Defense Agency Memo, March 10, 1955, File: Charlie Michaels Program, CCCD records.

. and I don't want to get losted from my mummy and daddy . . . so I will wear my tag all the time, even when I go to bed at night.”⁷³

The event was emblematic of the links between the FCDA, Las Vegas, and the test site, and the impact of these relationships on children. While clearly a carefully planned and staged publicity stunt, the program nonetheless yields a great deal of information about how authorities thought of children. In many ways, the event was designed to keep the press and public from thinking about the tags' applications, and to instead focus attention on the children, who were obviously selected to be photogenic. References to helping lost children be located, however, were mixed with references to being “hurt” by an atomic bomb. In general there can have been little doubt that the tags were designed for use after a nuclear attack. The fact that Las Vegas was chosen as the location for the unveiling, and that the announcement took place on the date of an open test, makes this association quite clear. It seems clear that the unveiling had been planned in a way that would use the children to distract from these facts, however, and prevent the press from focusing on the actual uses of the tags. Not only were children being tagged for nuclear destruction, then, but used to disguise that fact.

Unlike earlier versions of ID tags, these tags did not indicate blood type, while the “religious preference” of the owner was added, a clear sign that some of the pretences that had characterized the earlier program had been abandoned.⁷⁴ The FCDA bulletin announcing the Pet Milk program supported this conclusion by suggesting that with “the

⁷³ “National ‘ID’ Tag Campaign Kicked Off Here by Six Vegas Youngsters,” *Las Vegas Sun*, April 24, 1955.

⁷⁴ *Ibid.*

development of more powerful weapons, the need for such a program has grown.”⁷⁵ The FCDA felt the program to be necessary because of newer, more powerful weapons, and expected it to be applied primarily as a program for children. State civil defense officials also endorsed the program. State Civil Defense Director Floyd Crabtree remarked, for example, that “The State Supt. of Schools . . . is in hearty accord with this program, and you may be assured that school officials in your area will cooperate.”⁷⁶

The authorities responsible for the tagging program feared a public outcry, and a backlash from parents. They sought to avoid drawing attention to the possibility of using the tags to identify bodies after a nuclear attack, which nonetheless appears to have been one of the principal purposes of the program. Al Freeman’s public relations brief on how the unveiling should be handled stressed that “it is important that no word of this story be released before our timetable of promotion starts. This is to crush any advance and premature criticism of the idea of tagging children, which is sure to crop up.” He added that “once we start our timetable, and it moves on time, the criticism that is natural to break out will be smothered by the fast-moving events of the distribution of the tags (and the witnessing of the A-test by children.”⁷⁷ In spite of officials’ concern, or perhaps because of their calculated and careful treatment of these matters, Las Vegas parents and press do not appear to have reacted negatively to the campaign.

The lack of opposition to these tagging programs is puzzling. It is difficult to imagine how, with so many children being given the tags, so few parents objected to the

⁷⁵ Federal Civil Defense Administration, “Distribution of Official Civil Defense Identification Tags,” *Advisory Bulletin* 181 (February 24, 1955).

⁷⁶ State Civil Defense Agency Memo, March 10, 1955, File: FCDA Charlie Michaels Program, .CCCD records.

⁷⁷ Al Freeman, Freeman Company Public Relations, “Operation Tot-Tag,” February 19, 1955, 5.

idea of tagging their children for identification after an attack. While the response of parents and the community cannot be conclusively understood or explained with the evidence available, it can certainly be suggested that the efforts of civil defense officials played a role. It also seems clear that, having accepted the test site and supported it enthusiastically, the community was more supportive of civil defense programs as a result. Las Vegas was often told that their city was high on the target list, and it may be that many parents simply accepted the tags as something that might one day be needed. If there were concerns about the program, they were expressed in private. None of the individuals interviewed for this study, however, remembered their parents opposing the tags. This may simply reflect the strong climate of opinion in Las Vegas, which prevented people from criticizing the test site through the 1960s. A similar type of pressure not to complain, grounded in anti-communism, may have existed around civil defense programs for children.

Memories and Long Term Effects of Civil Defense Programs

While they received civil defense messages at home, at school, and through community-wide programs, most of those interviewed remembered the school and community-based programs better. Using the evidence gathered for this study, then, there is more to support Christopher O'Brien's suggestion that children experienced the Cold War in age-segregated cohorts than Laura McEnaney's theory that private life was "militarized" through civil defense. As was discussed earlier, the only major civil defense issue to affect children at home was fallout shelters.

Throughout the decade, this generation of children grew older. By the time "shelter mania" reached its peak, many of them were at or approaching high school age.

They would certainly have been aware that, according to the prevailing wisdom of the time, they could not survive an atomic attack without shelter.⁷⁸ Most of them, however, do not appear to have found this fact disturbing. Some, like Jean Salmon, remembered thinking that a friend or neighbour's shelter would be open to them. David McReynolds, however, remembered asking his neighbours if they would let him in, and that "they would chuckle, and there would be no real answer to that question."⁷⁹ Most of those interviewed simply did not want to think about the possibility of an atomic attack, or assumed that such an attack would never come. When asked how the less-than-reassuring response from his neighbours made him feel, for example, McReynolds replied:

It was sort of like [how] everybody smoked at that time . . . I often wondered what people thought about when they smoked, and those horrible things that could happen to their lungs. But it wasn't anything that was going to happen today, so people just went on smoking and enjoying their lives and not worrying about it too much. And that's the same feeling we had about the a-bomb. That if it came, life would be horrible, and we might be wiped out . . . but it wasn't going to happen today. That's just one of the worries that you have in the back of your mind, like if you would catch lung cancer from smoking, or if you would be abducted.⁸⁰

In the final analysis, it is surprising that children were not more affected by the civil defense messages directed at their homes. These messages became less and less reassuring as time passed, and changes in civil defense policies sometimes contradicted what families had been told before. While this caused some complaints in Las Vegas, most families, and many of those interviewed, do not appear to have been disturbed. McReynold's statement suggests that while people may have worried about these things, this was a worry that existed in the background, rarely becoming an urgent concern, or

⁷⁸ Rose, *One Nation Underground*, 186-213.

⁷⁹ David McReynolds, interview.

⁸⁰ Ibid.

requiring serious thought. This may, of course, simply suggest that families paid very little attention to the civil defense messages which were directed at them.

The individuals interviewed remembered much more, and had much more to say, about civil defense drills at school. It seems clear that duck and cover drills were the most common, and perhaps the only, type of civil defense drill to be regularly applied in Las Vegas schools during the 1950s.⁸¹ Some of the individuals interviewed remembered having participated in drills, while others did not, suggesting that some schools may have had more drills than others. Even those who remembered the drills, however, varied greatly in how much they remembered. Patrick Bailey remembered them quite clearly:

In first grade we started having Civil Defense drills. The principal would press the magic button (which only he had access to) and a special buzzer would sound. We would then dutifully slip under our desks while the teacher (who obviously didn't need to participate), walked around to make sure we were all "safe." She would then signal the drill monitor in the hall outside the classroom. When all the teachers reported "okay," or whatever, the monitor went to report to the principal while we students resumed our seats, having escaped the holocaust.⁸²

Bailey's account suggests that the drills were clearly identified as such, and had a set sequence of events to be followed. Bailey's description was somewhat flippant, suggesting a perception that the drills were not always taken seriously, or that he saw them as ridiculous in retrospect. Similarly, David McReynolds stated that the drills "weren't frequent because I think that . . . the school teachers or the school principals did it because they were told to do it, but I don't think anybody thought they'd do any good

⁸¹ Carroll Tyler to I.R. Crandall, May 28, 1952, Las Vegas, File: AEC letter, CCCD records.

⁸² Patrick Bailey, written response, August, 2005.

even at the time, and so they were just sort of going through the motion.”⁸³ Much of what McReynolds and Bailey remembered about the drills suggested a retrospective judgment of how effective the drills would have been. McReynolds was probably incorrect, for example, in asserting that his teachers would have doubted the drill’s effectiveness. The tone of Bailey’s account probably reflects a similar sense of the drills as contrived and unlikely to be effective. It is much more likely that these individuals would have formed this impression in later years than at the time, since there is a great deal of evidence to suggest that teachers took the drills very seriously, even when children did not.⁸⁴

For other individuals, there was nothing light hearted about their memories of the drills. Many remembered that the drills focused on the danger of flying glass and windows, reflecting the influence of civil defense propaganda like *Duck and Cover*. Bridget McKenna, for example, remembered “looking up at the windows in the classroom” during a drill, “and realizing that that was a danger point.”⁸⁵ Interpreting her experiences differently from Bailey and McReynolds, McKenna added that because of the drills, “there was a very strong feeling . . . that there actually could be an attack at some time.”⁸⁶ Nonetheless, she still felt that “somehow this preparation was going to make your survival more likely.”⁸⁷

⁸³ David McReynolds, interview by Timothy Cole, June 2, 2005, Las Vegas, Nevada.

⁸⁴ Carroll Tyler to I.R. Crandall, May 28, 1952, Las Vegas, File: AEC letter, CCCD records.

⁸⁵ Bridget McKenna, interview by Timothy Cole, May 31, 2005, Las Vegas, Nevada.

⁸⁶ Ibid.

⁸⁷ Ibid.

Some children looked upon the drills as little different from fire drills that, as Laura Ungaro put it, “break up the day tremendously – that was great sport.”⁸⁸ Others remembered the drills as something that gave them “a break from math.”⁸⁹ Some, however, found their experiences of the drills genuinely disconcerting, and remembered fearing that the drills would not have protected them. Jean Salmon stated:

I remember the fear that one of my teachers created in me when she told me that Boulder Dam would be a prime target, and that the water would flood – so I envisioned for many years that if there was an atomic bomb that it wouldn’t do any good to get out of that desk ‘cause the flood was just going to wipe us off the face of the earth if the atomic bomb didn’t do it.⁹⁰

For at least some of the children, then, the drills at school did create serious fears of an atomic attack.

These differences in what interviewees remembered may be due to the fact that some of them attended different elementary schools, or that they varied in age by a few years. Nonetheless, it is clear that most of them were given civil defense drills, and that teachers approaches to the drills were quite uniform, as prescribed by civil defense manuals. While Bailey and McReynolds remembered their experience of the drills as comical or not very serious, others remember being genuinely frightened by them. It is significant, however, that many of those interviewed who remembered the drills had no memory of civil defense activities in their homes.

The identification programs are a particularly interesting aspect of children’s experience of civil defense. Most of the individuals interviewed were still quite young

⁸⁸ Laura Ungaro, interview by Timothy Cole, July 2, 2005, Las Vegas, Nevada.

⁸⁹ Jean Salmon, interview.

⁹⁰ Ibid.

when issued the tags, and thus had only vague memories of wearing them. Others appear not to remember wearing them at all, in spite of the documentary evidence suggesting that nearly every child living in Vegas between 1951 and 1955 would have been given at least one.⁹¹ Laura Ungaro suspected that her parents would have kept their children from wearing the tags if they had been available, suggesting that “If the Vanderbilts weren’t wearing tags we weren’t going to be wearing them.”⁹²

In large part, children appear to have reacted to the tags as one might expect, making a game out of the tags for a while, or treating them as a form of jewellery, and eventually losing or refusing to wear them any longer. Patrick Bailey remembered that the tags “led to somewhat of an elitist game (We’re in the A-Positive Club. If you don’t have A+ you can’t be a member) and stuff like that. Poor Gary Stewart – he had AB-negative! On the other hand, his was the most exclusive club. . . .”⁹³ In an effort to encourage children to wear the tags, Bailey also remembered that mothers were instructed to fill in the lettering on the tags with nail polish.⁹⁴

Interviewees appear to have had different ideas about what tags’ uses were. Bridget McKenna and Ryan Barrett did not remember the tags until asked about them, but on being reminded, McKenna realized that “looking back I would say they were to identify in case of an attack of some sort. Same way they would be for military personnel. . . . I do not recall that that was ever presented to us in that way, but it was

⁹¹ See page 89.

⁹² Laura Ungaro, interview.

⁹³ Patrick Bailey, written response.

⁹⁴ Ibid.

important that we have them and important that we wear them.”⁹⁵ Carol Ross simply did not remember being told what the tags were for, adding that “nobody seemed to think that was weird.”⁹⁶ Laughing, however, she said: “I’m sure they didn’t tell us it was so they could identify us when we died.”⁹⁷

For some of those interviewed, the tags became an important part of their childhood memories. According to Bailey, “civil defense drills and dog tags were the best answers at the time, because nobody really knew what the *questions* should have been. By today’s standards, they were pretty silly – but not pointless. I doubt they’d have saved even one life in a real nearby bombing, but they did impress us kids with a sense that *something* bad could happen.”⁹⁸ For Ross, the tags symbolized the complacency of the Las Vegas community, and her feelings that the government failed Las Vegas on the test issue. “The people that I know still from school have the same feeling,” she said. “They saw it and they watched it and they wore their dog tags, but nobody ever told them that it was a harmful thing.”⁹⁹ Later on in her interview, she also stated that “I don’t think in the lower grades they deal with too much of what’s really going on, especially back then because, you know, they didn’t want to scare you. . . . Just wanted to put dog tags on you.”¹⁰⁰ While Bailey remembered the tags in a somewhat positive light, for Ross they connoted her community’s mistreatment by test site

⁹⁵ Bridget McKenna, interview.

⁹⁶ Carol Ross, interview by Timothy Cole, May 27, 2005, Las Vegas, Nevada.

⁹⁷ Ibid.

⁹⁸ Patrick Bailey, written response.

⁹⁹ Carol Ross, interview.

¹⁰⁰ Ibid.

authorities. For both, however, the tags took on their significance in later life, on recollection.

In general, the civil defense memories of those interviewed seemed to correlate with their reactions to the test site, as well as with their political perspective at the time of the interview. The women who had expressed the most anger over their childhood experiences of the tests, for example, were also those who remembered civil defense drills as a serious, sometimes fear-inspiring affair.¹⁰¹ Men like Ron Salmon, Bill Shelton, and Richard Vaughan, in contrast, either did not remember participating in civil defense drills, or quickly dismissed the idea that the drills had had any kind of a long-term impact on them.¹⁰² David McReynolds and Patrick Bailey, who represented a middle ground on the testing issue, both remembered the drills as a required activity, and not something that was taken seriously by anyone involved. In general, however, the reactions of the interviewees to civil defense drills were somewhat more diverse than their memories of the tests, with a wider variety of experiences recalled, less clearly grouped than their experiences of the test site.

¹⁰¹ Loralie Schauss, interview; Carol Ross, interview; Bridget McKenna, interview.

¹⁰² Ron Salmon, interview, Bill Shelton, interview, Richard Vaughan, interview.

CHAPTER FOUR: THE COLD WAR AT SCHOOL AND AT HOME

Many of the children who grew up in Las Vegas during the period of atmospheric testing were very aware of how closely related their experiences of nuclear tests and civil defense drills were to their nation's ongoing conflict with the U.S.S.R. While most of the individuals interviewed do not remember hearing or using the term "Cold War" during the 1950s, they were certainly aware of the tensions between their own nation and the Soviet Union.¹ As a result, it is important to know what the children were taught about the Soviet Union and communism in order to understand how they felt about the test site and civil defense. Anti-communism was a powerful ideological component in children's education, and they were taught from a very early age to view Russians and communists as their enemies. Some parents taught similar messages at home, while others taught divergent ideas. At home, children were also influenced in their ideas about the Cold War by television shows and other media. Using insights gained from these various sources, many of those interviewed developed their own views and ideas about who the Cold War enemy was, and what the conflict involved. Often, efforts to educate children on these matters led them to develop a mental picture of what an atomic attack would involve, and what it would be like to experience one. From the perspectives of children, adult statements could be confusing or unclear, which led some of them to develop unique perceptions of the Cold War enemy.

¹ See, for example, Patrick Bailey, written response, or Charlene Herst, interview by Timothy Cole, June 13, 2005, Las Vegas, Nevada. While few people used the term "Cold War" at the time, it is still useful as the best way to describe the interrelated issues and concerns about the U.S.S.R., nuclear weapons, and communism.

Not all children, of course, experienced the Cold War in the same way. Some of those interviewed asserted that the Cold War did not play an important role in their childhoods. Ron Salmon, for example, stated, “When I was growing up, the Cold War meant nothing. I was too busy being a child.”² Salmon was, of course, older than some of the other interviewees, and was thus no longer a child for much of the period of highest Cold War tensions. For most of those interviewed, however, the threat of atomic attack, and the perceived danger posed by communism, were important and significant parts of their childhood experiences. Despite his desire to stress the minimal impact of the Cold War on his life, even Ron Salmon remembered that in his youth, “We knew what communism was. We knew it was something we didn’t want to belong to. We realized communism was the enemy.”³ As a child, Salmon was also well aware that the test site had been created “for the defense of the country” in its struggle against the USSR.⁴ While, by virtue of their interest in participating, the individuals interviewed for this study may have been more likely to remember and stress the Cold War’s impact on their childhoods, it seems clear that even those who did not feel the Cold War played an important role in their childhoods still had significant memories of the uncertain, anti-communist atmosphere of the 1950s. Children’s exposure to a great deal of information about the Cold War and atomic bomb is evident in the many ways in which Las Vegas parents and teachers sought to prepare children for life in the atomic age.

² Ron Salmon, interview by Timothy Cole, June 24, 2005, Las Vegas, Nevada.

³ Ibid.

⁴ Ibid.

Teaching the Cold War

In Las Vegas schools, children learned about the Soviet Union and communism, and about the threat that these Cold War enemies posed to the United States.

Teachers also made efforts to teach them about the atom and atomic weapons. Based on the interviews, many teachers appear to have been very direct with students, stressing that communism was an evil ideology, and leading children to believe that the Russian threat was imminent. In many cases, teachers appear to have decided of their own accord to teach children about the Cold War. It would have been natural, of course, for children to have questions for their teachers about these topics, and for teachers to feel the need to respond to them. The Nevada Department of Education, however, had not revised its curriculum standards since 1939, and did not undertake a major review until 1958.⁵ As a result, the Cold War education that children received was often informally structured, and varied considerably. The individual decisions of teachers, the adoption of new textbooks, and changes in prevailing ideas about teaching and the Cold War were therefore the primary forces that changed how and what children learned. While formal curriculum standards did not change during the early 1950s, the records of Nevada's State Textbook Commission, the memories of individuals who attended Las Vegas schools, and a selection of local and national educational publications suggest how some Las Vegas children learned about communism, the Cold War, and the atomic age.

Many remembered being frightened by their teachers' approaches to these topics. Joyce Moore said, "We were taught that they [Russians] were terrible, evil people, that if

⁵ Raymond A. McGuire, "Curriculum Revision in the State of Nevada," *Nevada Educational Bulletin* 40, no. 1 (September 1958): 7.

they have the chance, they'd kill you . . . Communism was the bane of the world's existence."⁶ Similarly, Bridget McKenna remembered that "In school people in authority, your teachers and the school administrators were telling you that 'Yes, we have enemies, and those enemies could actually send planes or missiles.'"⁷ She said the possibility of a Russian attack was a particularly "big deal" in the first and second grades.⁸ It is not surprising, then, that many of those interviewed remembered imagining the Cold War enemy simply as "planes or missiles" in the sky.⁹

It is clear that experiences varied, however, since some people did not remember learning the same things.¹⁰ Carol Ross said that her education did not deal "too much with what's really going on, especially back then because they didn't want to scare you." She said "I don't think as a kid we quite knew what that [communism] was anyway."¹¹ Ross nonetheless remembered one teacher who was concerned about Soviet espionage, and told her class that "we had to be very careful of what we said and where we took pictures and things like that, and I always remember [thinking] 'Why? Nobody's stealing my camera.'"¹²

Ross' memories suggest that Las Vegas public school teachers tried to teach children about the communist and Soviet threat from a very early age. The two interviewees who attended Catholic schools did not remember learning as much about

⁶ Joyce Moore, interview by Timothy Cole, July 13, 2005, Las Vegas, Nevada.

⁷ Bridget McKenna, interview by Timothy Cole, May 31, 2005, Las Vegas, Nevada.

⁸ Ibid.

⁹ Ibid.

¹⁰ Richard Vaughan, written response, August, 2005.

¹¹ Carol Ross, interview by Timothy Cole, May 27, 2005, Las Vegas, Nevada.

¹² Ibid.

current affairs and the Cold War.¹³ Despite this, Laura Ungaro made her own connections between the Cold War and what she learned in Catholic schools:

The Fatima secrets were supposed to be released in 1960, and in my mind, coming from Catholic schools, this loomed very large – I remember being a kid loading dishes into the dishwasher in the house at night and just crying, tears running down my face, being frightened about the revelations that the Fatima secrets might have, thinking that they would have to do with nuclear war.¹⁴

Ungaro was clearly aware of the possibility of nuclear war, and connected the Cold War with other aspects of her life that adults might not have expected.

While young children clearly learned a great deal about the Cold War in school, older children and teenagers were encouraged to discuss and learn about the Cold War in even greater depth. At Las Vegas High School, for example, government and history classes gave students “the background necessary in continuing the democratic government that our nation is so fortunate in having” and “the knowledge necessary to combat any political disease which may invade our country and threaten our freedom.”¹⁵ This statement implies that anti-communism was an important part of these classes. Many of the individuals interviewed for this study could remember and restate much of what they learned in these classes.¹⁶

Often, children and teenagers were also encouraged to think about and discuss Cold War-related issues outside of school. In cooperation with the *Las Vegas Sun*, for example, educators staged an annual youth forum in Las Vegas, where high school

¹³ Laura Ungaro, interview by Timothy Cole, July 1, 2005, Las Vegas, Nevada; Bridget McKenna, interview.

¹⁴ Laura Ungaro, interview.

¹⁵ Las Vegas High School, *The Echo* (Las Vegas, 1963), 55.

¹⁶ David McReynolds, interview by Timothy Cole, June 2, 2005, Las Vegas, Nevada.

students from Clark County schools discussed and debated a number of current topics, often Cold War issues. The 1961 Forum included a discussion of “Disarmament, Espionage, Summit Meetings, [and the] United Nations,” and how “these disagreements might lead to a Third World War.” Another discussion was directed at “Civil Defense, Missiles and Rockets, Constitutional Revisions, [and] Congressional Investigating Committees,” and asked, “how can we get more Americans to really appreciate the opportunities connected with the right of suffrage?”¹⁷ In 1956, Nevada school children were encouraged to enter essays in a national competition on the topic of America as a “Beacon of Hope.” The contest guidelines declared that “today more than any time since the days of the cavemen, America’s beacon of hope is needed. The principles of the dignity and worth of humanity are in peril. The winds blow false ideas – of hate and godlessness – [that] threaten to blow out forever the beacon of America’s hope.” Junior high and high school students were asked “how do *you* the young people of America . . . feel about ‘America – Beacon of Hope?’”¹⁸ Contests and competitions of this type were common throughout the 1950s. That children heard or read a steady stream of similar questions and statements suggests that they would have been well aware of the major events and issues of the Cold War, or perhaps simply given a simplified understanding of the threat of a godless communism. Certainly, they were encouraged in these contexts to contemplate the possibility of another major war, and to think of communism as a dangerous and hateful ideology.

¹⁷ Janet Hadland, “Today’s Students are Tomorrows Leaders,” *Nevada Educational Bulletin* 42, no. 4 (March 1961): 21-22.

¹⁸ “America – Beacon of Hope,” *Nevada Educational Bulletin* 37, no. 3 (January 1956): 22-3.

Instruction in Cold War issues was often informally structured and varied considerably. The Nevada State Textbook Commission, however, was responsible for deciding what texts could be used in Nevada schools, and thus exercised a degree of control over what was taught. Throughout the 1950s, members of the Commission appear to have been very concerned with educating children about the atom, as well as about the Soviet Union and communism. They were also concerned about protecting Nevada's children from any threat of communist subversion, and from the influence of communist ideology. In 1956, for example, the State Textbook Commission discussed "the necessity for careful study for evidence of un-Americanism in texts submitted for adoption."¹⁹ There was even a call by a member of the textbook commission for the establishment of "a committee to study Americanism in Nevada schools."²⁰ Although the Commission did not implement this proposal, the promotion of "Americanism" continued to be a key concern through 1958, when it introduced into Nevada school systems "a guidebook for Americanism" titled *Let Freedom Ring*, "for enhancement of citizenship training."²¹ Clearly, the Commission felt that Nevada schools had a duty to protect children from communist ideology, and to teach them to oppose it.

More generally, the commission also made it a priority to adopt books that would educate children for the atomic age. Three textbooks dealing with atomic energy were approved for use by the State Textbook Commission during the 1950s. The first book

¹⁹ Minutes of the Regular Meeting of the Nevada State Textbook Commission, January 16, 1956, Nevada Department of Education Records, Nevada State Archives, Carson City. (hereafter referred to as Minutes, State Textbook Commission)

²⁰ Ibid.

²¹ Minutes, State Textbook Commission, March 13-14, 1958.

approved was *You and Atomic Energy*, adopted March 1950.²² Added to this list in later years were John Lewellen's *The Mighty Atom* and *The Walt Disney Story of Our Friend the Atom*, by Heinz Haber.²³ This last book, in particular, was widely circulated throughout the United States. Interestingly, these books focused quite narrowly on teaching children about the science of the atom, and made only brief references to the atomic bomb. They also devoted whole chapters to possible peaceful uses of atomic energy.

In *The Mighty Atom*, for example, author John Lewellen seems to have been concerned primarily with explaining the idea of the atom to children who might find the concept difficult to understand or accept. The book stated that "many true things *seem* impossible, but we believe them. The same thing is true of the atom. Many things about it seem impossible, but scientific tests show they are true, so we believe them, even though we cannot see the individual atoms themselves."²⁴ The book only mentioned the atomic bomb briefly, but it assumed that children would already know a great deal about it, and moved on very quickly to say that "we are more interested in the good the atom can do."²⁵ As the last word, however, Lewellen stated, "We hope the people all over the world can keep peace . . . without using the Mighty Atom for war. For if it is put to good use, it can do more wonderful and unbelievable things than Mighty Mouse could ever do, to make life happier for everyone."²⁶

²² Minutes, State Textbook Commission, March 20, 1950.

²³ Nevada State Department of Education, *State Adopted Textbooks for Nevada Elementary Schools, 1960* (Carson City: Nevada Department of Education, 1960), 28.

²⁴ John Lewellen, *The Mighty Atom* (New York: Alfred A. Knopf, 1955), 9.

²⁵ *Ibid.*, 48-9.

²⁶ *Ibid.*, 58.

The Mighty Atom sought to relate the atom to children by comparing it to Mighty Mouse. Both *You and Atomic Energy* and *Our Friend the Atom* attempted to do so by comparing the atom to the genie of the magic lamp. Haber's approach was to view the genie as a force that needed taming, whereas Lewellen suggested in *You and Atomic Energy* -- his second book on the topic -- that "Atomic energy is now ours to put to many wonderful uses. We rival the genie in Aladdin's lamp."²⁷ Lewellen's work was reviewed in the *Nevada Educational Bulletin*, one of the main educational publications produced in the state, to which teachers, administrators, and anyone who had a professional interest in education would have had access. The *Bulletin* described Lewellen's work as:

attractively illustrated, with helpful diagrams and sketches . . . [it] answers questions about the atom, the atomic bomb, the atomic furnace, and peacetime possibilities of atomic energy. It has special value for teachers of elementary and junior high pupils who want simple, non-technical material that explains atomic energy in terms boys and girls can understand.²⁸

Heinz Haber wrote *The Walt Disney Story of Our Friend the Atom* for older children than those who would have read *You and Atomic Energy* and *The Mighty Atom*. Published in 1956, the book was produced in conjunction with a short film. Because Haber targeted his book at older readers, it was more direct about the "hidden and tremendous force" of the atom, which had "entered the scene of our modern world as a most frightening power of destruction, more fearful and devastating than man ever thought possible. We all know the story of the military atom, and we all wish it weren't true." The tone of Haber's work was more frank than Lewellen's, and Haber stressed

²⁷ John Lewellen, *You and Atomic Energy: And its Wonderful Uses* (Children's Press Inc., 1949).

²⁸ "Exploring Atomic Energy," *Nevada Educational Bulletin* 33, no. 4 (March 1952): 30.

repeatedly that “the atomic Genie holds in his hands the powers of both creation and destruction. The World has reason to fear those powers of destruction. They could yet destroy civilization and much of humankind.” His final suggestion to children, then, was that “our last wish should simply be for the atomic Genie to remain forever our friend! It lies in our own hands to make wise use of the atomic treasures given to us.”²⁹

It is not clear whether these books were actually used in Las Vegas schools, or how. Given the enthusiastic response to them by the textbook commission and the *Nevada Educational Bulletin*, however, and the fact that Southern Nevada schools would have had a particular interest in explaining the atomic bomb to their pupils, it seems likely that teachers used these books in classes, or at least placed them in school libraries. While none of the interviewees mentioned these works specifically, the fact that all three books, produced over a span of seven years, approach the problem of teaching children about the atom in similar ways, suggests that there was some consensus among educators on how to teach children about these matters. It is reasonable to conclude, then, that children living in Las Vegas learned to think of the atom in similar ways, as a magic genie who was capable both of great good and great destruction. Interestingly, few of those interviewed remembered finding the concept of the atom confusing or difficult to believe, as the authors of these works feared. In fact, most of them seem to have grasped and accepted the idea rather quickly.³⁰

The decisions of the State Textbook Commission, of course, were not the only factors influencing Nevada teachers' and school administrators' approaches to educating

²⁹ Heinz Haber, *The Walt Disney Story of Our Friend the Atom* (New York: Dell, 1956), 127.

³⁰ Bridget McKenna, interview.

children for the Cold War. They were also influenced by such professional journals as the *Nevada Educational Bulletin* and the *Nevada Parent Teacher*. The opinions and approaches reflected in their pages are good examples of some of the general attitudes prevalent in the United States and Nevada about educating children for the Cold War and atomic age.

The *Nevada Educational Bulletin* would likely have been the most widely read by teachers and school officials. Throughout the 1950s, articles in the *Bulletin* revealed that Nevada educators were modifying what they taught about the Cold War, and were concerned about preparing children to live in the atomic age. A 1952 article, for example, encouraged parents and teachers to “never let your children hear you speak slightly of your country. Teach every boy and girl the meaning of allegiance . . . [and] enthuse each and every one with your sincerity as you repeat to them patriotic stories and poems.” This was to be done so that children would know that “it is quite unthinkable that their allegiance . . . should ever waver.”³¹ The same article also suggested that educators should “not distress our children or ourselves by contemplating any untoward conditions which are beyond our control, and which we pray and trust will never come to pass.”³² As these statements suggest, Nevada educators were encouraged to provide a stabilizing and encouraging influence on children, and to avoid alarming them over the possibility of war or atomic attack. At the same time, they tried to instil patriotism in children, in order to prevent them from falling under the influence of communism.

³¹ Florence Jane Ovens, “Children in Today’s World,” *Nevada Educational Bulletin* 34, no. 2 (November 1952): 24.

³² *Ibid.*, 25.

At times the *Bulletin* sounded a more pessimistic and critical note. One article told readers that “children are more seriously affected by international tensions, rising inflation, and fear of total destruction than many people realize.” It suggested that “each generation has witnessed the impact of war and threat of war upon its citizenry – upon the home and family, the standard of living, morals, industry, education and all phases of life.” The Cold War, however, was different, because of the “contradictions and paradoxes with which American adults as well as youth are faced. Totalitarianism does not appeal to Americans. . . . It was, therefore, with dismay and bewilderment that they saw our government supporting reactionary regimes.” Concerned about mixed messages, the author suggested that “not only are citizens baffled but teachers find it difficult to explain to young people, who see no reason for granting loans and supplies to dictators.”³³ Another article noted that “researches have repeatedly demonstrated that most children suffer acutely from real and fancied fears. These fears are especially numerous among upper elementary and junior high students.”³⁴ While some articles in the *Bulletin* encouraged teachers not to trouble children, others suggested that children were already deeply troubled by the atmosphere and events of the Cold War; they expressed concern that this was breeding cynicism and doubt among the young.

The *Bulletin* was also concerned about educating older youth for the Cold War. It published reviews of books such as *What We Can Do About Communism*, for example, which it described as “a pocket size book which presents the communist threat in a

³³ Association of Supervision and Curriculum Development, “Children Affected by Tensions, Inflation, and Fear of Destruction,” *Nevada Educational Bulletin* 34, no. 2 (November 1952): 20-22.

³⁴ Lyle M. Spencer, “Fears,” *Nevada Educational Bulletin* 33, no. 3 (January 1952): 23-4.

concise, succinct, factual, logical and challenging fashion . . . [and] proposes 11 planks in an American platform, and seven things we can do to combat and defeat communism.” According to the *Bulletin*, the book would make “very good reading for high school classes in American government.”³⁵

The *Bulletin* was not the only publication that would have influenced Las Vegas school teachers. They also had access to the *Nevada Parent Teacher*, produced by the Nevada Congress of Parents and Teachers. During the 1950s, this publication regularly ran articles dealing with civil defense, communism, and the Cold War. Clearly, Parent Teacher Association (PTA) members were concerned about the impact of these issues on their children’s education. In 1960, for example, a Membership Proclamation published in the *Nevada Parent Teacher* reminded PTA members: “the fevered affairs of mankind hover at the peril point . . . not only the survival of individual men and nations but the survival of mankind is at stake.” The proclamation went on to suggest that “we parent-teacher members are well aware of the present danger and of the greater peril to come should we fail to rise to the challenges of our time. We realize that two ideologies, conflicting in temper and morality, are being weighed and judged by millions of people.” PTA members were called upon to “put forth hard, unremitting, self sacrificing effort to keep ourselves a nation dedicated to exercising our own freedom”³⁶ and to “intensify our efforts to help all peoples advance toward that happier time when political domination will die and the death-dealing engines of war will be transformed into the life-giving

³⁵ “What We Can Do About Communism,” *Nevada Educational Bulletin* 45, no. 1 (September 1963): 44.

³⁶ “Membership Proclamation,” *The Nevada Parent Teacher* 13, no. 1 (Sept-Oct 1960): 4.

implements of peace”³⁷ Clearly, Nevada’s PTA members viewed themselves and their children as playing an important role in the Cold War, and were concerned about the impact of the Cold War on their children.

Sometimes, Las Vegas schools did more than instruct children in the dangers of communism and Soviet aggression. Older youths, in particular, were often encouraged to prepare to play a role in any conflict that might develop. This was particularly true in the early 1950s, when the outbreak of the Korean War triggered a limited re-mobilization, and talk of Universal Military Training. At Las Vegas High School, students had the option of enrolling in the Reserve Officer Training Corps (ROTC). Bill Shelton, who enrolled in the program, and later served as a Green Beret in Vietnam, believed that enrolling in the ROTC was “probably the smartest thing I ever did in one respect.”³⁸ The program was an extra class, involving as much time as any other class, and taught, according to Shelton, “some discipline . . . the basics of being a soldier and drill and ceremony, how to properly wear the uniform, how to carry your weapon, and we had marksmanship training also. It was a good preparatory course for somebody that had never really been around the military.” Las Vegas High School yearbooks reveal membership in the ROTC to have been quite small, and Shelton remembered that “ROTC was not that popular, even back then.”³⁹ The 1951 yearbook described some of the activities in which ROTC members might have participated, stating: “This year the ROTC unit participated in the United Nations Day Ceremonies, and in the Armistice Day

³⁷ Ibid., 5.

³⁸ Bill Shelton, interview by Timothy Cole, July 7, 2005, Las Vegas, Nevada.

³⁹ Ibid.

parade. They also held a three day encampment at Nellis Air Force Base.” Interestingly, the yearbook suggested that since “universal military training seems inevitable in the future, this program is a valuable asset to any high school curriculum”⁴⁰

Nearby Nellis Air Force base offered similar opportunities and encouragement to students who were interested in joining the Air Force. Many of those interviewed remembered visiting Nellis Air Force base for school trips, air shows, or open house events. For many children and youths, these experiences led to a desire to serve in the air force. Bill Shelton remarked, for example, that at the time he “wanted to be in the Air Force so bad I could taste it,” while Jean Salmon recalled that “we were proud of Nellis Air Force Base and of the training that was going on out there, and a lot of the boys in high school all wanted to sign up at Nellis.”⁴¹ In their yearbook, Las Vegas High School students described “a squadron of sun-flecked jets streak[ing] across the sky,” that represented to them “a colorful display of air supremacy, developed through leadership and cooperation.”⁴² A picture of fighter jets in the same yearbook bore the caption, “A sense of security prevails as Nellis Air Base jets sweep Vegas skies.”⁴³ Clearly, the children and youth of Las Vegas felt an attachment to the air base, and were proud of their association with it.

For the most part, Las Vegas educators appear to have encouraged these efforts to attract young people into the armed services. Particularly during the early 1950s, educators often seemed to assume that their students would serve in the military at some

⁴⁰ Las Vegas High School, *The Wildcat Echo* (Las Vegas: 1951), 102.

⁴¹ Bill Shelton, interview; Jean Salmon, interview by Timothy Cole, June 24, 2005, Las Vegas, Nevada.

⁴² Las Vegas High School, *The Wildcat Echo* (Las Vegas: 1953), 9.

⁴³ *Ibid.*, 8.

point. In 1951, for example, the *Nevada Educational Bulletin*, encouraged teachers to make use of a new set of films titled “Are You Ready for Service?” which were “designed to orient high school students in their planning for military service, well in advance of induction or enlistment.” The films were intended “to serve as a guide for young men especially (and young women incidentally) who are wondering how best to insert two years of military training in their long-range planning for the future.” These films were designed to “make clear the objectives of this new requirement for citizenship and will aid in making the necessary adjustments with minimum interference in educational and vocational plans.”⁴⁴ A year earlier, the *Bulletin* had called for schools to “improve their offerings for health and physical fitness, [and] Americanism and citizenship,” and suggested that “speed-up of the fourth year of high school for boys nearing draft age is desirable.”⁴⁵

The launching of Sputnik in 1957 was one of the most important events of the Cold War as it affected American education and school systems. It signalled the beginning of a heated debate over what many viewed as a failure of American education to produce enough scientists, technicians, and engineers who could help the United States keep pace with Soviet rocket development. Nevada teachers were encouraged, in the wake of the “Russian rocket assault on space,” to change the way they taught science. Suddenly, intensive training in science was “considered as valuable for the educated citizen; the lawyer, minister, teacher, economist or homemaker, as well as for the future

⁴⁴ “Are you Ready for Service,” *Nevada Educational Bulletin* 33, no. 1 (September 1951): 27-8.

⁴⁵ “The School’s Place in the 1950 Mobilization Period,” *Nevada Educational Bulletin* 32, no. 1 (September 1950): 42-3.

scientist.”⁴⁶ One of the most important results of this new attitude was the passage of the National Defense Education Act in 1958. This act created new funds for science education, and incentives to attract more skilled science teachers. In Nevada, teachers were encouraged to take workshops and acquire instructional materials for “aviation education,” in order to “become better informed about the space age in which they teach and . . . to adapt their teaching to that of the needs and interests of the youth.”⁴⁷ The article told teachers that aviation education required them to “attempt to develop a fairly good basic knowledge, and then . . . use every opportunity to help students develop units of learning which encompass this area,” and “promote . . . knowledge of aviation.”⁴⁸

The new emphasis on science education would certainly have had an impact on children living in Las Vegas, but for most of the individuals interviewed for this study, the immediate reactions to the launching of Sputnik were more memorable. Given the outcry following news of the launch, it is little wonder that most, like Jean Salmon, simply remembered everyone asking, “How did we let that happen?”⁴⁹ While news of Sputnik created a great deal of concern among adults, children did not always react in the same way. Carol Ross remembered being in the fifth grade and “trying to explain to my teacher that I didn’t think they’d put Sputnik in the air so that they could drop bombs from it just on us.”⁵⁰ Bridget McKenna, who would later become editor of a science

⁴⁶ John H. Marean, “Suggested Changes in Science Teaching,” *Nevada Educational Bulletin* 40, no. 3 (January 1959): 28.

⁴⁷ Mary E. Murray, “Aviation Education Attracts Nevada Teachers,” *Nevada Educational Bulletin* 40, no. 1 (September 1958): 12.

⁴⁸ Burton C. Newbry, “A Case for Aviation Education,” *Nevada Educational Bulletin* 39, no. 4 (March 1958): 20.

⁴⁹ Jean Salmon, interview.

⁵⁰ Carol Ross, interview.

fiction magazine, simply found it exciting.⁵¹ The 1958 Las Vegas High School yearbook described the preceding school year as “a year of Sputniks and Intercontinental Ballistic Missiles,” and noted that “much greater emphasis was placed on science than in the past. Perhaps this was the reason behind the increased interest of Chemistry Club members.”⁵²

Throughout the 1950s, children and youths attending schools in Las Vegas learned a great deal about the Soviet Union and communism. They were told that these enemies represented a threat to their nation, their freedom, and their lives. While teachers and parents were concerned about frightening children, it seems that in most cases they nonetheless felt the need to tell children a great deal about the Soviet threat. With little formal or official direction about how the basics of Cold War politics should be taught to children, the messages that children received from their teachers nonetheless appear to have been quite constant. School officials and teachers told the youths of Las Vegas that the struggle with communism would be a major force in the course of their lives, and that, as they grew older, they were to play an important role in the struggle. Above all, they attempted to make children believe that the struggle between America and the Soviet Union was a matter of protecting their lives and their freedom, and was a conflict that it would be unthinkable to lose.

Cold War Instruction at Home

At home, children received a much more diverse set of messages about the Cold War from their families. All of those interviewed, however, were still taught to regard the Soviet Union as a major threat in some way. Laura Ungaro, for example, who

⁵¹ Bridget McKenna, interview.

⁵² Las Vegas High School, *The Echo* (Las Vegas: 1958), 115.

attended Catholic schools in Las Vegas, did not remember learning very much about current affairs at school, but stressed that “we learned that at home . . . my family was very concerned about the Russians, and what the Russians were doing.”⁵³ Ungaro said that in her home “there was always a lot of conversation about communism,” and “we all thought there were communists” working within the United States.⁵⁴ Joyce Moore remembered her mother saying exactly the opposite, and stated that “we weren’t afraid of Russian’s ‘cause we never saw any . . . they’re bad, we’re good, but they’re not here today.”⁵⁵ Regardless of whether or not they perceived an immediate threat, almost all families seem to have felt that communists were indeed “bad.” David McReynolds, for example, remembered that virtually everyone he knew as a child “believed that their goal was to take us over, and that the way they were going to take us over was by gradually taking over countries one by one until they had a critical mass.”⁵⁶ Charlene Herst, in contrast, remembered having animated conversations at family dinners about Senator Joseph McCarthy: Her family’s opposition to the anti-communist hearings was “more our focus” in her experience of the Cold War than was Russia.⁵⁷

For some children, the connections between the Cold War and their home life were more complex. Several of those interviewed remembered being afraid of particular Russian politicians, most notably Soviet Premier Nikita Khrushchev. Often, this was because they associated his personality with a parent or authoritarian figure in their lives at home. Laura Ungaro, for example, was “frightened as a child, because he

⁵³ Laura Ungaro, interview.

⁵⁴ Ibid.

⁵⁵ Joyce Moore, interview by Timothy Cole, July 13, 2005, Las Vegas, Nevada.

⁵⁶ David McReynolds, interview.

⁵⁷ Charlene Herst, interview by Timothy Cole, June 13, 2005, Las Vegas, Nevada.

[Khrushchev] spoke different language, and it was a very harsh sounding language, so we were automatically intimidated by that.” This was coupled with the fact that her father was “first generation Italian-American, so he had a very harsh booming voice. We associated those kinds of sounds with authority, and so to us the Russians with the language sounded very authoritarian. They didn’t sound gentle to me.”⁵⁸ Whereas Ungaro’s fear stemmed from association with a benign form of parental authority, Gayle Brandt associated Khrushchev with her abusive stepfather. According to Brandt, her stepfather was “like a dictator, and the fear started with his fist on the family and then [escalated], the political environment being what it was.” Brandt’s experience of the Cold War was “strongly affected by the fact that our home was in total [chaos] . . . my fear levels were compounded because of a very bad situation at home.”⁵⁹ When asked how she imagined the Cold War enemy, Brandt responded: “I pictured evil leaders, having lived with one as a kid. That’s my point of reference – evil agendas.”⁶⁰ For Brandt, fear of a foreign threat and fear of a domestic danger ran together, and reinforced one another. Ungaro’s experience, too, suggests that this type of merging of fears, and of Cold War experiences with life at home, took place in healthy, stable homes as well as in situations involving abuse.

Carol Ross believed that her generation and that of her parents experienced the Cold War very differently. According to Ross, children and youth her age “kind of stood back and thought, ‘hmm, how logical is this?’” when told that the Soviet Union might

⁵⁸ Laura Ungaro, interview

⁵⁹ Gayle Brandt, interview by Timothy Cole, June 28, 2005, Las Vegas, Nevada.

⁶⁰ Ibid.

attack. Their parents, however, were more inclined to think that “if the Japanese, a little tiny place, got Pearl Harbor, Russia could get to us real quick.” According to Ross, “my mother’s generation and the generation before hers, were real paranoid . . . and I definitely think that my generation thought differently, because nothing ever [actually] happened.” Ross was a very critical and skeptical person, however, both as a child and in her youth. She remembered that “my family did not agree with me when it got to the Vietnam War, because they felt if we let the communists win in Vietnam, they’d take over Disneyland next. And that wasn’t exactly my theory.”⁶¹ Many other children were no more skeptical than their parents about the possibility of a Soviet attack, and in some cases, children were more likely to be worried than their parents were. Gayle Brandt felt that her fear levels, for example, were far beyond what any other members of her family experienced or remembered.⁶²

At home, Las Vegas children appear to have learned as much about the Soviet Union and communism from their favorite television shows and books as they did from their parents. One television show, in particular, had an impact on many of the individuals interviewed. Broadcast between 1953 and 1956, the program “I Led Three Lives” was extremely popular in Las Vegas. Based a book by the same name, it was the autobiography of Herbert A. Philbrick, who allegedly was recruited into the communist party, before realizing the error of his ways, and becoming a double agent for the FBI. While historians have studied many similarly themed television shows and films, *I Led Three Lives* was unusual in its level of popularity, and the loyal following which it had in

⁶¹ Carol Ross, interview.

⁶² Gayle Brandt, interview.

Las Vegas. David McReynolds remembered that the program was “pretty persuasive” in its portrayal of communist infiltration, while Laura Ungaro remembered that “we were all riveted to that.”⁶³ Children who watched and enjoyed such programs would have been much more likely to believe that there were communists working within their country and community to undermine their freedom and way of life. Certainly, many children were more likely to follow “I Led Three Lives” than they were to follow the Army-McCarthy hearings.

Other programs, films, and books had an impact on how Las Vegas children thought about and experienced the Cold War. Most of them, however, were produced by national media outlets and Hollywood, and were not specific to Las Vegas. Other historians have studied these sources extensively. Their work has highlighted how effectively communism and communists were vilified in the popular culture of the early 1950s, and how enemy infiltration was portrayed as an imminent and very serious threat.⁶⁴ Las Vegas children learned a great deal of what they knew and thought about the Cold War from popular culture. When asked about McCarthy and the communist threat, for example, Bill Shelton remembered that “things were going on, and they kind of got boring because I didn’t understand the real nature of communists, but I knew that they weren’t good people to have in your government. How did I know that? Well, TV told me that.”⁶⁵

⁶³ David McReynolds, interview; Laura Ungaro, interview.

⁶⁴ See, for example, Thomas Pat Doherty, *Cold War, Cool Medium, Television, McCarthyism, and American Culture* (New York: Columbia University Press, 2005).

⁶⁵ Bill Shelton, interview.

Children's Experience of the Cold War

At home and at school, children received a great deal of information about the Cold War. At times, messages from different sources were unclear or contradictory. In general, however, most children were successfully led to believe that communism and Russia were mortal enemies, and that the communist threat to their country and their homes was real and imminent. Children did not, however, always react to these ideas in the manner that adults assumed or hoped that they would. Often, they misinterpreted or misunderstood what they had learned, while in other cases they developed an exaggerated sense of the threat. The interviews conducted for this study suggest that children envisioned the Cold War in unique ways, by interpreting the various messages they were given in whatever ways made the most sense to them. Given the active imaginations of children, it is no surprise that the understandings of the Cold War that individual children developed ranged from the horrifying to the comic, and from the reasonably accurate to the utterly illogical by adult standards.

Because of the many names that the Cold War enemy was given, some children had difficulty defining and putting a face to the threat. Carol Ross, for example, was unsure how to imagine the Cold War enemy as a child, and remembered "people talking about the reds, and thinking, 'Well, let's see. In school, the Indians were the reds, so we're supposed to be very careful of anybody that's red. Would that be red hair? Do they have red skin?' That's when I was really young."⁶⁶ Ross reflected: "I felt like we have these enemies, but I'm not sure how you tell who they are. And I don't think I was

⁶⁶ Carol Ross, interview.

really sure why they were our enemies, 'cause it just never made real sense. 'Why do we have to be afraid of these people? What is it?'"⁶⁷ Some children imagined large, threatening groups of people. Laura Ungaro, for example, said: "We just understood them as barbarians . . . we likened them to the Huns, although my mother will assure you that the Huns had nothing on the Russians."⁶⁸ For other children, the enemy was simply defined as being different. Recalling that "here in Las Vegas we didn't have a lot of diversity," Joyce Moore remembered that "you were suspicious of anybody that had an accent."⁶⁹ While some children viewed the enemy as foreigners, Gayle Brandt pictured "missiles, planes, helicopters. That's how I pictured it. I did not picture people . . . I still don't."⁷⁰ Ron Salmon remembered visualizing communists as a domestic threat, rather than an international one. "My vision of communists," according to Salmon, "were people in the United States that would go to communist meetings. They would belong to the Communist Party just like the Democratic Party or the Republican Party . . . communism to me was just a way of life that people lived by."⁷¹

Some children tended to personify the Soviet threat. Like Laura Ungaro and Gayle Brandt, Jean Salmon remembered being afraid of Nikita Khrushchev. Whereas Ungaro and Brandt identified Khrushchev with a figure at home, however, Salmon simply viewed him as the face of the enemy. Khrushchev, according to Salmon, was "up there with Hitler in my mind's eye. He was just an evil man." Her sentiment was somewhat more complex than this, however, since "communism was evil, and him being

⁶⁷ Ibid.

⁶⁸ Laura Ungaro, interview

⁶⁹ Joyce Moore, interview

⁷⁰ Gayle Brandt, interview.

⁷¹ Ron Salmon, interview.

a communist made him evil in my mind. I was never told he was an evil man. I was told that communism wanted to rule the world and that it would attack in the United States.”⁷²

David McReynolds remembered that, “It wasn’t identified with one person like you would identify with Hitler as being the evil person of World War II. It was more a group thing, and I think that’s consistent with the view of socialism and communism as being a group effort.”⁷³

Clearly, the individuals interviewed imagined the Cold War enemy in a variety of ways. These statements suggest, however, that in most cases children were encouraged to view communism, an abstract concept, as their primary enemy. Also common to most of these images of the enemy is a profound sense of communism as aggressive, dangerous, and evil. Many of the individuals interviewed marvelled at how readily they accepted this view of the enemy as children. Joyce Moore, for example, remembered that she “never thought about there being mothers and fathers and children over there. I never really thought about that. I only saw an enemy.”⁷⁴

Aside from developing perceptions of the Cold War enemy, many of those interviewed were also led to believe by their parents and teachers that their city and their homes were targets for atomic attack. It is not surprising, then, that some children developed images and fantasy scenarios of what it would be like to experience an atomic attack. Some of the individuals interviewed even had recurring dreams of nuclear war. Gayle Brandt for example, recalled “the fear that I lived in every single day. Nightmares,

⁷² Jean Salmon, interview.

⁷³ David McReynolds, interview.

⁷⁴ Joyce Moore, interview

as a kid, of worldwide destruction. It was just the mindset in those days. Everybody was sure that evil Russia was going to come and annihilate us all.”⁷⁵ As an adult, Brandt continued to have “very strong reactions to fleets of airplanes,” because of her childhood fear of Russian attack. According to Bridget McKenna, the possibility of Russian attack “had been with me since I was five years old and went to school for the first time and was told that at any time the Russians could send jet planes over and bomb the crap out of us, so I’d always lived with the possibility.” McKenna added, however, that “I don’t think it had ever been really heavy on my mind. It just seemed almost normal, I guess, but it must have seemed completely normal, because what would I have had to compare it with?”⁷⁶

While some children feared an attack, others were much more afraid of what might happen afterwards. When asked if she was ever afraid of nuclear attack, Laura Ungaro replied: “We were more fearful of the aftermath. It never entered a kid’s mind ‘cause you’re too egocentric at that point. . . . We never thought about dying in it.” Instead, the major concern was “where would you get water from, how would you eat, where would you live? How you would live. You know, we presumed in a nuclear holocaust everything would be a barren desert, and we had read about Hiroshima and what had happened to the Japanese.”⁷⁷ David McReynolds remembered that:

I had the kind of unrealistic planning that a young kid would go through. I remember going to the store and buying extra boxes of .22 shells because when the Russians came I wouldn’t be able to get any more, and if I had a whole bunch of boxes of .22 shells in my closet then I might be able to use

⁷⁵ Gayle Brandt, interview.

⁷⁶ Bridget McKenna, interview.

⁷⁷ Laura Ungaro, interview.

them to defend myself and my family . . . that would be assuming that I managed to somehow live through the bomb explosion and fallout and stuff like that.⁷⁸

Not all children, of course, had such dramatic visions of a Soviet attack. Carol Ross, for example, remembered that there were “lists running in a paper . . . for the top ten places that would be bombed and Las Vegas was like number three.” She remembered being skeptical of this even as a child, however, since “they’d have to get here from someplace, so how are they going to get across California or Mexico or whatever to get here. How can we be number three?”⁷⁹ Similarly, Richard Vaughan wrote that “even though they said Hoover Dam would be a key target, we figured it was too far inland to be a viable target – that interception would have already taken place, and there were some serious mountains between it [Russia] and Las Vegas.”⁸⁰ As Ross’ and Vaughan’s responses illustrate, some children had a remarkable level of skepticism, enabling them to question the likelihood of Soviet attack that others considered so likely. As Ross suggested, this may have been due to the fact that their generation did not have memories of Pearl Harbour and the Second World War. It is also possible, of course, that these types of responses have benefited from the hindsight of later years.

The manner in which those interviewed imagined their Cold War enemy and the possibility of atomic attack illustrates the diverse ways in which children responded to what they were taught about the Cold War, Russia, and the atomic bomb. Each of the interviewees remembered responding differently to the Cold War-related concerns and

⁷⁸ David McReynolds, interview.

⁷⁹ Carol Ross, interview.

⁸⁰ Richard Vaughan, written response.

atmosphere of 1950s Las Vegas. This variety of experience can be explained, in part, by the variety of messages about the Cold War that children received from different sources. At least in school, however, a common set of beliefs and attitudes toward communism and Russia appears to have existed throughout the school system. It seems clear that teachers and parents worried about how children would react to the Cold War, and were concerned about the potential for children to fall under the influence of communist ideology. This concern appears to have taken priority over any concerns about upsetting children, and they were frequently and repeatedly taught about the danger that communism represented. Efforts to teach children about the atom seem to have been a much lower priority, and to have focused on the science of the atom, minimizing discussion of its potential uses as a weapon. While a wider variety of viewpoints were expressed privately in children's homes, the home was also where children watched television programs that represented particular, generally accepted perspectives on the Cold War and communism. At home, children had fewer restrictions on what they thought or imagined about the Cold War and communism, and it was through the context of the home that some children developed their own unique understanding of Cold War issues. The variety of children's experiences is one of the most striking conclusions to be drawn from the interviewee's general recollections of the Cold War. Like children in other times and places, children during the Cold War lived in and imagined their own particular worlds.⁸¹ Children in Las Vegas were no different, and each of the

⁸¹ Elliot West, *Growing up with the Country: Childhood on the Far Western Frontier* (Albuquerque: University of New Mexico Press, 1989), zviii.

interviewees seems to have latched onto and remembered only portions of what he or she was told about communism and the Cold War.

CHAPTER FIVE: CONCLUSION

In each of the preceding chapters, one aspect of Las Vegas children's experience of the Cold War or nuclear bomb was examined. It has been clear throughout these investigations, however, that children did not always make such clear distinctions between the different facets of their Cold War experience. For most of those interviewed, memories of the test site, civil defense programs, and the Cold War ran together, and were not easily separated. This seems to confirm Christopher O'Brien's suggestion that children experienced the bomb and the Cold War as closely linked, making connections between these areas of experience, and not always recognizing the differences between them.¹ More importantly, it suggests that these different types of experiences and memories had a cumulative impact on the lives of the individuals interviewed. What follows is an attempt, using the interviews, to determine how these memories and experiences affected individual children over time. This will allow for a discussion of the role these memories may have played in subsequent social and political transformations in Las Vegas, and for a review and assessment of some of the literature discussed in Chapter One. In particular, some observations can be made about what approaches future scholarship on these subjects might most effectively use.

Clearly, each of the individuals interviewed experienced the test site, civil defense, and the Cold War in a different way. Each of them also selected, both through the process of remembering and through the process of the interview, particular memories that they viewed as significant, and which they felt fit within their life

¹ Christopher O'Brien, "And Everything Would Be Done to Protect Us: The Cold War, the Bomb, and America's Children," (Ph.D. Diss.: University of Kansas, 2002), 338.

narratives. Doing so allowed them, as Alessandro Portelli suggested, to connect themselves to history, and to link their present selves to their understanding of the past.² Given the creative nature of this process, and the distortions inherent in it, it is not surprising that the narratives produced by the interviews were each very different. The actual experiences of the individuals interviewed, of course, also varied a great deal, since they attended different schools, were raised by different families, and belonged to different classes, genders, races, religions, and age groups.

Having accepted the variety of experiences which interviewees had, and the constructed nature of the memories accessed through the interviews, it is somewhat surprising to find that many of these memories contained similar themes, or similar perceptions of the past. Scholars like Portelli or Thompson, of course, would argue that these commonalities reflect the use of common narrative schemes by the interviewees, employed to form a connection between themselves and history, and also reflecting the interests of the historian conducting the interview.³ They could also reflect common inherited or received narratives, along the lines of Spencer Weart's nuclear images. The similarities among some of the interviewee's accounts, however, is at times uncanny, reflecting more than an effort to fit within a particular narrative theme, or the repetition of a received narrative or image. Many of the interviewees, for example, described the experience of watching a nuclear test as akin to watching Fourth of July fireworks. This is clearly a powerful association, and one that many of the interviewees made instinctively. It seems to be a product of actual experience, since it is too specific a detail

² Ibid.

³ Ibid.

to have been used as a way of relating the interviewee to history. This, and the fact that there is considerable documentary evidence to support many of the memories of the individuals interviewed, suggests that at least some of these themes reflect something more than narrative constructions. They represent, in other words, reasonably reliable, and useful, interpretations of past experiences.

Regardless of how accurate they are, or of how they were constructed, many of the memories and experiences described by the interviewees played a role in their later life and politics. If only for this reason, they are worth examining on their own terms. Whether or not Patrick Bailey's assessment of the civil defense drills he experienced was a retrospective judgment, for example, it still represented a truth to him, and both reflected and affected his subsequent experiences, as well as his personality and politics at the time of the interview.⁴ Since one of this study's goals was to link childhood memories of the test site to the development of individual opinions about nuclear issues, this type of relationship -- between an experience, the memory of it, and the subsequent development of an individual's politics -- is of particular interest here.

In general, interviewees who remembered their childhood experiences in a similar way seem to have been more likely to have similar views on nuclear issues at the time of the interview. Interestingly, these groupings of similar memories also seem to correlate with other characteristics of the interviewees. Many of the women who were interviewed, for example, had similar types of memories, which were clearly distinct from the memories of most of the male interviewees. Similarly, older individuals like

⁴ Patrick Bailey, interview.

Ron Salmon and Bill Shelton had memories which were similar to each other. In each case, the individuals who had similar memories of their childhood experiences were more likely to have analogous views on nuclear issues as adults. Many of the women interviewed, for example, remembered watching nuclear tests with their families, as part of a “Fourth of July” atmosphere. Their memories often focused, in other words, on the context of the experience, and the emotion that they attached to the experience, rather than on the physical experience itself.⁵ Men, in contrast, were more likely to describe the blast itself in detail, paying less attention to who they were with at the time, or how they felt about the event as children. Women were also more likely to remember civil defense education and drills as a serious and sometimes frightening affair, whereas many of the men did not remember the drills at all, or quickly dismissed the idea that they had had an impact on them.⁶ Finally, women were more likely to have emotion invested in their memories of their Cold War education, and their thoughts about the Cold War enemy. The men who were interviewed were more likely to remember the enemy as an abstract, amorphous concept or ideology.⁷

Having either experienced or remembered their childhood experiences differently than the men, the women who were interviewed were also more likely to oppose projects like Yucca Mountain than the men were. They were more likely to feel anger over how the tests were handled, or to express distrust of their government because of the

⁵ Jean Salmon, interview; Loralie Schauss, interview; Carol Ross, interview; Laura Ungaro, interview; Bridget McKenna, interview; Gayle Brandt, interview; Joyce Moore, interview.

⁶ Ron Salmon, interview; Bill Shelton, interview; Richard Vaughan, written response.

⁷ Ron Salmon, interview; Bill Shelton, interview; David McReynolds, interview; Richard Vaughan, written response; Patrick Bailey, written response, Ryan Barrett, interview.

experiences they had had as children.⁸ This is not to say, of course, that all of the female interviewees were in agreement with each other, or that some of them did not support Yucca Mountain. Gayle Brandt, for example, was a strong supporter of the project, because she believed that it would make people safer in the long run, and believed that the Department of Energy had “done their homework.”⁹

One of the most striking implications of the oral history interviews conducted for this study, then, is that gender appears to play an important role in defining how individuals remembered and responded to their Cold War childhoods in Las Vegas. Certainly, scholars have been aware since the 1980 presidential election that different attitudes towards nuclear issues, and the use of force internationally, played a role in the emergence of a voting “gender gap” between American men and women.¹⁰ Statistical evidence of this change began to emerge the same decade, when individuals of the interviewees’ ages were entering their forties. It may be that the different responses of the men and women interviewed for this study to their childhood experiences reflect the same differences of opinion that have contributed to divergent voting behaviour. It is an open question, however, whether these differences of opinion were the result of differences in how boys and girls experienced the test site and Cold War, or whether the differences between their memories were the result of their divergent views in later life. It may be that different forms of gender socialization caused boys and girls to experience

⁸ Jean Salmon, interview; Loralie Schauss, interview; Carol Ross, interview; Laura Ungaro, interview; Bridget McKenna, interview; Gayle Brandt, interview; Joyce Moore, interview.

⁹ Gayle Brandt, interview.

¹⁰ Elise Boulding, “The Gender Gap,” *Journal of Peace Research* 21, no. 1 (1984), 1-3.; Daniel Wirls, “Reinterpreting the Gender Gap,” *Public Opinion Quarterly* 50 (1986), 316-330.; Barbara Norrander, “The Evolution of the Gender Gap,” *Public Opinion Quarterly* 63 (1999), 566-576.

the events of their childhoods differently, paying more attention to different aspects of their experiences. If so, this would suggest that the different memories of men and women are the result of a complex system of mutually reinforcing gender-related attitudes, memories, and issues.

Other groupings of interviewees with similar memories of their Cold War childhood also seem to have similar views on nuclear issues. Ron Salmon and Bill Shelton, for example, both had memories of the test site that focused much more on describing the physical experience of the test, and much less on who they were with or how the test made them feel. Both of these individuals were also quick to dismiss the idea that civil defense drills had had an impact on them.¹¹ They were considerably older than most of the other interviewees, Shelton having been born 1937, and Salmon in 1940, and both of them described themselves as somewhat conservative. Both of them felt that the test site had been a necessary and important component of American efforts to fight communism.¹² David McReynolds and Patrick Bailey, however, seem to have been more liberal than Salmon or Shelton at the time of the interview, and were younger. While their memories also focused on the physical experience of nuclear tests, they also described how the tests had made them feel, and the context in which the experience occurred. Bailey and McReynolds both suggested that adults had not taken civil defense drills very seriously, and that they had been a half-hearted exercise. As was discussed in Chapter Three, however, these memories seem to reflect a retrospective perception of the

¹¹ Ron Salmon, interview; Bill Shelton, interview.

¹² Ibid.

drills. Bailey and McReynolds had much more ambiguous or non-committal responses to questions about their stance on Yucca Mountain, and the handling of the nuclear tests.¹³

These groups of responses, of course, are very broadly drawn, and individual interviewees' experiences and ideas often fell into more than one of these categories. While Bill Shelton's memories and the political views he developed later in life clearly justify the comparison of his memories to Ron Salmon's, for example, Shelton was opposed to the Yucca Mountain project, saying "I think it's dangerous . . . [and] I'm very opposed to that usage of it." Similarly, Gayle Brandt's memories of being frightened by the atmosphere of the Cold War and civil defense drills, along with her memories of watching the nuclear tests with her family, are comparable to the memories of Joyce Moore, Gayle Brandt, and Laura Ungaro. Despite this, Brandt was a staunch supporter of the Yucca Mountain project.¹⁴

Based on the interviews conducted for this study, it seems clear that individuals who either experienced or remembered their Cold War childhoods similarly were more likely to have similar views on nuclear issues as adults. The crucial question, then, is whether these opinions were shaped by memories, or whether opinions determined how the interviewee remembered the past. Given that this study was based on such a small sample of interviews, representing a very narrow section of the Las Vegas population, it may be impossible to answer that question conclusively here. The evidence gathered does suggest, however, that the relationship between memory and politics was not one-way. As was suggested in Chapter Three, for example, the inability to remember civil

¹³ Ron Salmon, interview; Bill Shelton, interview; David McReynolds, interview; Patrick Bailey, interview.

¹⁴ Gayle Brandt, interview.

defense programs, or quick dismissal of them, by many of the men who were interviewed seems to reflect the perspective of the interviewees in 2005 more than it does their historical experiences. Conversely, many of the men continued in 2005 to display a belief in the profound danger which communism had represented, even when the political environment and their political views did not present any incentive retrospectively to remember the communist threat in this way.¹⁵ Similarly, the individuals who felt distrustful of their government over the tests often based their opinions on perceptions of the damage caused by the tests, which they had developed in later years. Thus, Bridget McKenna described her memory of watching a test with her family as “chillingly quaint.” Despite playing a role in the development of McKenna’s opinions about these issues, however, the memory itself does not reflect this, and is associated with feelings of excitement, security, and family togetherness.¹⁶ In cases like these, then, the relationship between individuals’ memories and their political views at the time of the interview is important, but does not seem to have distorted the memory itself. Clearly, some of the memories of the individuals interviewed were influenced by their political perspectives at the time of the interview. In other cases, the memories appear to have overpowered the individual’s politics, particularly in areas where their political views would have provided less incentive for the distortion of memories.

Setting these groups of similar memories aside, the interviews also allow for some much broader conclusions about how Las Vegas children experienced the tests, civil

¹⁵ Ron Salmon, interview; Bill Shelton, interview; David McReynolds, interview; Ryan Barrett, interview; Richard Vaughan, written response; Patrick Bailey, written response.

¹⁶ Bridget McKenna, interview.

defense, and the Cold War. Perhaps the single most frequently mentioned aspect of interviewees' experiences was anti-communism. In their memories of civil defense, the test site, and the Cold War, each of the individuals interviewed remembered their experiences as being closely related to the threat of communism. Documentary evidence used in this study has confirmed that Las Vegas children and youth were repeatedly told about their enemy, and informed that the enemy was working to destroy their way of life, and perhaps even their homes, families, and communities. Many children had difficulty understanding this threat, and created some unique visions of what the Cold War enemy would look like, or what a nuclear attack would be like. Above all, however, the interviewees were left with an impression that this enemy was fundamentally dangerous and evil.¹⁷

The effects of this single-minded, overpowering anti-communist atmosphere was something that many of those interviewed continued to live with in their later life, even after the Cold War had ended. Loralie Schauss, for example, stated that "I never thought I would live to see the Berlin Wall come down." When it did, according to Schauss, "It's like we were lost, because we no longer had a definable enemy, and the communists have been the enemy I had faced ever since I was in fourth grade. It was like, well, what do we do now?" When she was interviewed in 2005, Schauss's political sympathies were definitely on the left of the political spectrum. Interviewees who were firmly on the right also had similar lasting impressions of communism as their enemy. Individuals like Bill Shelton and Gayle Brandt, for example, felt that in some ways communism had been

¹⁷ See Chapter Four.

successful in undermining American ideals, through what Brandt called “social programs and the . . . ‘I deserve, I deserve’ [or] ‘give me give me’ attitude.” The image of communists as evil and the enemy had persisted, in other words, so far into their adulthood that the communists were blamed for whatever the individual believed was wrong with American society.¹⁸ The interviews conducted for this study, then, seem to support Alan Nadel’s suggestion that individuals adopted their nation’s policies as part of their own “cultural agenda.” For some individuals, the structure of their own personal narrative was so “intimidated” by the larger narratives of Cold War policy, that they had difficulty adjusting their own life narratives after the Cold War ended, and the larger narrative no longer applied.¹⁹ These individuals’ responses to the September 11, 2001 terrorist attacks appears to have been closely related to their memories of the Cold War. As Loralie Schauss suggested, “I think to most Americans it's been very confusing. We were raised with these terrible enemies whose sole goal is to bury us, and now they're not there, and I think they're trying to shift that enemy to the terrorists. The Arab terrorists are now our communists.”²⁰

The recollections of the individuals interviewed for this study shed new light on how Elaine Tyler May’s concept of domestic containment operated. It is interesting to note that, for many of those interviewed, school was the site of the most Cold War education, while home life was usually a much less important aspect of children’s experience of the Cold War. May’s theory that the home was a shelter from Cold War

¹⁸ Gayle Brandt, interview; Bill Shelton, interview.

¹⁹ Alan Nadel, *Containment Culture: American Narratives, Post-Modernism, and the Atomic Age* (Durham: Duke University Press, 1995), 2-8.

²⁰ Loralie Schauss, interviewed by Timothy Cole, July 5, 2005, Las Vegas, Nevada.

anxieties, where these fears were contained and controlled, seems to be supported by this study.²¹ The individuals interviewed seem to have felt less fear when watching the tests with their families, and to have felt safer and more insulated from the Cold War while at home. Based on the interviews conducted for this study, however, there is very little evidence to suggest that home life was “militarized,” as Laura McEnaney has suggested.²² While civil defense planning and literature was clearly focused on the home, the interviews suggest that much of this literature was ineffective, and that children had much more dramatic and meaningful experiences of civil defense at school. It may be that parents sought to insulate their children, and themselves, from stressful civil defense scenarios at home, and either consciously or unconsciously ignored or undermined the civil defense messages which were directed at them.

Several general conclusions can be made about the atmosphere of Cold War Las Vegas. The evidence here seems to support both Constandina Titus’ suggestion that anti-communism played a key role in encouraging Las Vegans to accept the test site, and Stephen Whitfield’s suggestion that the struggle with the Soviet Union “haunted public life” during the Cold War.²³ Clearly, an extraordinarily strong anti-communist sentiment seems to have permeated all discussions of the test site, the Cold War, and civil defense in Las Vegas. One aspect of Las Vegans’ reactions to the test site that Titus does not appear to have considered, however, is that this anti-communist atmosphere made it very

²¹ Elaine Tyler May, *Homeward Bound: American Families in the Cold War Era* (New York: Basic Books, 1988), 14.

²² Laura McEnaney, *Civil Defense Begins at Home: Militarization Meets Everyday Life in the Fifties* (Princeton: Princeton University Press, 2000), 4-5.

²³ Stephen J. Whitfield, *The Culture of the Cold War*, 2nd ed. (Baltimore: Johns Hopkins University Press, 1996), 231; Titus, *Bombs in the Backyard*, 145.

difficult for Las Vegans to express dissent, even when they had concerns about the tests. Combined with the efforts of the Las Vegas business elite, this atmosphere generated strong pressures towards conformity. The apparent welcome that Las Vegans gave the test site may, in other words, have existed only on the surface. Widespread agreement on the issue of anti-communism seems to have helped to discourage dissent on other issues.

Most of the literature that has attempted to link the experience of a Cold War childhood with 1960s protest does not seem to be supported by this study. As has been suggested, the relationship between childhood experiences and subsequent politics is much more complicated than a simple connection of cause and effect. Many of the interviewees, for example, were upset or angered by the AEC's handling of the tests, and by their childhood experiences of the Cold War.²⁴ While this led some of them to oppose nuclear waste, power, or weapons projects as adults, or to be distrustful of the government, very few of those interviewed described themselves as having participated in 1960s protest culture, or as having been part of a radical or protest group at any point during their lives.²⁵

Of all the theories connecting a childhood during the Cold War with subsequent protests and political shifts that were discussed in the introduction, the ideas of Peter Filene and Alice L. George appear to be the most useful in analysing the experiences of the interviewees. George's suggestion that it was the insecurity they felt during the Cold War era that caused children to begin questioning adults' handling of the Cold War and

²⁴ Jean Salmon, interview; Loralie Schauss, interview; Carol Ross, interview; Laura Ungaro, interview; Bridget McKenna, interview; Gayle Brandt, interview; Joyce Moore, interview.

²⁵ Loralie Schauss, interview; Carol Ross, interview.

other issues seems to be in line with the experiences of the interviewees who were most vocal in their opposition to nuclear projects, and the government's handling of the nuclear tests and civil defense. Loralie Schauss, Bridget McKenna, Carol Ross, and Gayle Brandt, for example, all explained the feelings of anger and distrust that they felt by referring back to fears and experiences that they had as children. Daniel Gomes' and Peter Filene's suggestions that it was the security that children felt during the Cold War era that propelled them towards rebellion do not seem to apply to this set of interviewees.²⁶ Filene was correct, however, in suggesting that the best approach to analyzing opposition movements that developed in subsequent years was to trace "the formative experiences of the dissidents themselves."²⁷ Among the interviewees, those who opposed nuclear projects, and were distrustful or critical of their government, usually linked their opposition or scepticism to their experiences of the Cold War, civil defense, and nuclear tests as children.²⁸

Given the small and narrow sample of people who were interviewed for this study, it would be difficult to make firm conclusions about the impact of Las Vegas children's experiences of the test site on the long term development of their community's nuclear politics. That their memories can be sorted into broad groups, however, that correlate with particular demographic characteristics and political views, appears to suggest that children in Las Vegas reacted to the tests in one, or sometime two, of a

²⁶ Peter Filene, "Cold War Culture Doesn't Say It All," in Peter Kuznick and James Gilbert, *Rethinking Cold War Culture*; Daniel Gomes, "Bert the Turtle Meets Doctor Spock: Parenting in Atomic Age America" in Scott and Geist, eds., *The Writing on the Cloud*.

²⁷ Filene, "Cold War Culture Doesn't Say It All," 167.

²⁸ Carol Ross, interview; Loralie Schauss, interview; Bridget McKenna, interview; Gayle Brandt, interview; Joyce Moore, interview; Jean Salmon, interview; Laura Ungaro, interview.

limited variety of ways. Certainly, many of the individuals interviewed had powerful memories of nuclear tests, civil defense drills, and Cold War education, which they connected to their critical view of the test site, and their opposition to other nuclear projects. Other individuals, however, did not have the same types of memories, and remained supportive of the tests. While more of the interviewees belonged to, or had experiences and opinions which were closer to, the first group than the second, this may simply reflect the composition of the sample of interviews, and can not be used to suggest that this reaction would be the most common amongst all Las Vegans who had grown up during the period of atmospheric testing. A much broader sample of interviews would need to be conducted in order to determine if this was the case.

Perhaps the most useful finding of this study, then, is that for individual interviewees, their experiences of the tests and Cold War as children have played an important role in the development of their political views on related topics. While, as has been discussed, some of the evidence that supports this conclusion may be due to retrospective memory distortion, there is enough evidence to suggest that in many cases, the experiences of children played an important role in the development of their nuclear politics in later years. Subsequent research, then, should focus on following the development of individuals' opinions through childhood and into adulthood, taking care to pinpoint and examine how opinions changed over time. This study's focus on childhood has made it difficult to determine when and how firm political views began to form and change. Knowing more about how this process occurred for each of the interviewees, however, would be the first step toward developing a better idea of the role played by childhood memories in this process.

These processes are of more than purely historical interest; since the September 11 attacks, a new generation of American children has been exposed to stimuli and messages which are comparable to those experienced by the interviewees. In 2006, the Nevada Test Site was being used for extensive counter-terrorism training operations.²⁹ In January 2006, the *Nevada Homeland Security Awareness Guide* was being distributed throughout Nevada and online. In large part, it was based on, and referred children to, a national program operated by the Federal Emergency Management Administration, titled “FEMA for Kids.”³⁰ “FEMA for Kids” features a rapping Hermit Crab named Herman as its mascot and spokesperson – a character who bears a remarkable resemblance to Bert the Turtle.³¹ If the Arab terrorists are indeed now “our communists,” then it is likely that a new generation of American children is beginning to absorb some similar messages to those received by the interviewees.³² Based on some of this study’s findings, homeland security and emergency management planners may be having a far more profound and lasting effect on children, and American life, than they realize.

²⁹ United States Department of Energy, “First Responder Training,” www.nv.doe.gov/nationalsecurity/homelandsecurity/responder.htm

³⁰ Nevada Homeland Security, *Nevada Homeland Security Awareness Guide* (Carson City, Nevada, Nevada Homeland Security).

³¹ Federal Emergency Management Administration, “FEMA for Kids,” www.fema.gov/kids.

³² Loralie Schauss, interviewed by Timothy Cole, July 5, 2005, Las Vegas, Nevada.



CERTIFICATION OF INSTITUTIONAL ETHICS REVIEW

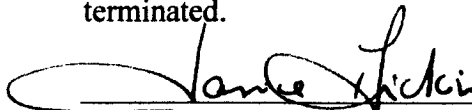
This is to certify that the Conjoint Faculties Research Ethics Board at the University of Calgary has examined the following research proposal and found the proposed research involving human subjects to be in accordance with University of Calgary Guidelines and the Tri-Council Policy Statement on *"Ethical Conduct in Research Using Human Subjects"*. This form and accompanying letter constitute the Certification of Institutional Ethics Review.

File no: **4378**
Applicant(s): **Timothy John G Cole**
Department: **History**
Project Title: **Growing Up Nuclear: Las Vegas Children and the Bomb**
Sponsor (if applicable):

Restrictions:

This Certification is subject to the following conditions:

1. Approval is granted only for the project and purposes described in the application.
2. Any modifications to the authorized protocol must be submitted to the Chair, Conjoint Faculties Research Ethics Board for approval.
3. A progress report must be submitted 12 months from the date of this Certification, and should provide the expected completion date for the project.
4. Written notification must be sent to the Board when the project is complete or terminated.



Janice Dickin, Ph.D, LLB,
Chair
Conjoint Faculties Research Ethics Board

May 10, 2005

Date:

Distribution: (1) Applicant, (2) Supervisor (if applicable), (3) Chair, Department/Faculty Research Ethics Committee, (4) Sponsor, (5) Conjoint Faculties Research Ethics Board (6) Research Services.

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