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Exploding the 1950s Consumer Dream: Mannequins and Mushroom Clouds at Doom Town, Nevada Test Site

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While the mushroom cloud rising above the Nevada desert is an iconic and familiar image, what went on beneath the cloud is hazier and less well understood. Surface level nuclear tests at the Nevada Test Site in the 1950s entailed extensive scientific, military and social experiments. This article focuses on two projects overseen by the Federal Civil Defence Administration (FCDA), Doom Town I and II, and their ties with 1950s cultural values and the consumer landscape. It situates the two mock American townscapes as part of the cultural battlefield of the Cold War, and explores how they served as powerful but also deeply flawed symbols of American capitalism and a new suburban way of life.

On May 5, 1955, over 100 million Americans watched Doom Town, a mock American townscape assembled at the Nevada Test Site, explode live on television. On July 17, 1955, around 90 million witnessed the grand unveiling of Disneyland across the state line in Anaheim, California live on ABC television. The broadcasts of both the nuclear test and the theme park opening proved bungled affairs. Weather delays frustrated the nuclear detonation of Apple 2 and the accompanying Federal Civil Defense Administration (FCDA) initiative Operation Cue that included Doom Town. Postponed five times, a riled press declared "the government's 6-million-dollar atomic 'circus'" to be "the biggest flop in show business" and retitled the event 'Operation Mis-Cue'.<sup>1</sup> Detonated ten days late, the device released radioactive clouds that engulfed the fake suburbia, thwarting media photography and preventing pictures of the townsite. At Disneyland, an extremely hot day combined with water shortages and a gas leak in Fantasyland hampered visitor experience. Traffic congestion delayed the arrival of special guests. Sprinklers misfired onto Davy Crockett, while unset asphalt trapped ladies' heels. Cast members referred to the opening as 'Black Sunday'. Both carefully planned and orchestrated televisual events went decidedly wrong 'on the day'.

Disneyland and Doom Town may seem polar opposites, but the places share much in common. Both functioned as propaganda landscapes of the 1950s: patriotic, Cold War performative architecture, assembled with a white middle class audience in mind, and molded into media spectacle for a new televisual nation. Both served as bunkers sheltering people from the perils of nuclear conflict: Disneyland offering a colorful escape to Never, Never Land, while Doom Town pointed to survival through sanctuaries at home. Most significantly, Doom Town and Disneyland sold concepts of reassurance, national pride, and selfreliance through the template of the 1950s consumer dream. John Findlay identifies Disneyland as an American 'magic land', an urban model sporting "futuristic material culture" and the "promise of a better life" that complemented post-1945 hopes and values; the same could be said of Doom Town.<sup>2</sup> Creative geographies extolling the wonders of American capitalism, the two landscapes provided models of white middle-class affluence. Both featured a Main Street, USA, celebrating the traditional ground zero of American commerce, and an artificial population of consumers (audio-animatronic figures at Disneyland, mannequins at Doom Town). Both captured the postwar zeitgeist in their suburban outlook as well as their embracement of an atomic-shaped future. Disneyland and Doom Town operated as didactic landscapes based around material wealth. They sold stories of mass abundance, of a middle class lifestyle that could prosper even in the face of Armageddon.

This article focuses on Doom Town as a consumer landscape. Designed to bolster nationwide civil defense initiatives and increase public knowledge of nuclear danger, the FCDA constructed and subsequently destroyed two versions of Doom Town at the Nevada Test Site in the 1950s: Doom Town I consisting of two suburban-type homes as part of Operation Doorstep during test Annie on 17 March 1953 and Doom Town II a whole town-site including radio towers and public utilities, as part of Operation Cue during Apple 2 on 5 May 1955. The Doom Town experiment offered a unique realization of the atomic home front. Part of the cultural battlefield of the Cold War, Doom Town served as a powerful symbol of American capitalism and venerated a new suburban way of life. In order to 'sell' civil defense to the American public, the FCDA situated the atom firmly within a contemporary consumer landscape. Backed by corporate sponsors, the FCDA assembled 'survival towns.' However, the destruction of these structures highlighted the vulnerability of the postwar dream, consumer culture and the potential futility of civil defense. The juxtaposition of modern life with atomic wasteland provoked a sense of horror in civilian onlookers, and questioned the notion of survivability in the nuclear age. Through the suburban

dereliction, the FCDA fully domesticated the bomb and brought it into America's backyard, but as a wholly negative force. Rather than survival towns, they were labeled 'Doom Towns' of the period. The projects reveal the challenges faced by the FCDA in promoting civil defense, and the limits of tying consumption with destruction.

While the mushroom cloud rising above the Nevada desert is an iconic and familiar image, what went on beneath the cloud is hazier and less well understood. Surface level nuclear tests at the Nevada Test Site in the 1950s entailed extensive scientific, military and social experiments overseen by a range of government agencies. While A. Costandina Titus and Richard Miller have documented the broader test series, scholars are yet to consider individual experiments in detail. Most tackle the workings of atomic culture on a broader level (Paul Boyer, Margot Henrikson, Scott Zeman), helping us to understand the spread of mass anxiety (Spencer Weart) or the visceral power of the 'mushroom cloud' itself (Scott Kirsch). In the realm of civil defense, Lee Garrison, Kenneth Rose, Guy Oakes, Joseph Masco, and Laura McEnaney have explored some of the challenges faced by the FCDA. In terms of Doom Town itself, Andrew Kirk has briefly looked at the imagery of the site, while Angela Moor mentions the open tests as part of her thesis on the promotion of civil defense, but how the specific project fits with FCDA policy, atomic culture or broader American values remains unclear.<sup>3</sup>

#### Selling the Home Front

Established by President Harry S. Truman in December 1950, the FCDA was charged with creating a national civil defense programme. First FCDA director Millard Caldwell spoke enthusiastically of a new "home front" for the Cold War propelled by "a growing consciousness for the need for Civil Defense."<sup>4</sup> The message of early FCDA propaganda proved relatively simple: if Americans embraced the concept of civil defense, they could survive nuclear war. While the US military experimented with a variety of "indoctrination projects" to sculpt the perfect nuclear soldier, the FCDA strived toward its own civilian counterpart. The organization launched a range of leaflets, tours, and short films, hoping to mold the civilian into a dutiful participant in a new theater of conflict. The FCDA's Annual Report to Congress (1955) stressed the necessity of thorough "indoctrination" to counter any lurking "defeatism" or "confusion."<sup>5</sup> Unlike U.S. troops trained to take orders, the FCDA faced a public initially wary over involvement in defense matters.

Operating within a constrained budget, the FCDA hoped to pass most of the responsibility for civil defense onto the individual, and encouraged a philosophy of self-help and civic duty compatible with time-honored American values. Hoping to win a nation over to its fledgling civil defense ideology, the Administration relied on modern sales techniques. As McEnaney observed, the FCDA "functioned as an ad agency whose client was the bomb." They also conceptualized the public as consumers. A civil defense marketing framework combined notions of self-reliance and volunteerism with consumer choice. For Moor, the "promotion of self-help as the main policy of preparedness effectively conflated the roles of citizen and consumer." Early rhetoric highlighted this amalgam process: a range of 1951 FCDA cards simply declared "Civil Defense is Your Business."<sup>6</sup>

The success of civil defense came to depend not just on the consumer, but also on the corporation. Operating on a skeletal budget (in 1951, the FCDA received \$65m from Congress rather than the \$535m requested), the FCDA increasingly turned to corporate alliances and company sponsorship to function. Exhibitions, brochures, and documentaries featured company branding. In 1955, the agency stated: "Industrial cooperation is essential to the success of a national Civil Defense program."7 Co-operation fused civil defense (and atomic culture) with a pro-business, pro-consumer mentality. Specific corporate alliances shaped civil defense content, strategy and rhetoric. Sponsored by the Paint & Lacquers Association, 'The House in the Middle' (1954) tied home decoration with holocaust survival. Chrysler produced 'Big Men in Small Boats' (1955) that showed how private watercraft could be used to escape disaster. The Institute of Life Insurance-sponsored 'To Live Tomorrow' (1955) analogized nuclear attack to a daily train commute gone wrong for businessmen, with "information, leadership, a job to do" saving the day. As FCDA director Millard Caldwell himself underlined, "Civil defense is an insurance policy."8

Doom Town embodied the FCDA's consumer and corporate turn. Staff conceived Doom Town as the perfect platform to show and sell civil defense measures. Doom Town could highlight what kind of provisions, home fittings and shelters to buy in order to survive attack. The project presented a unique public relations opportunity. Employed by the FCDA to advise on how best to promote disaster ID tags for kids, Freeman Company suggested schoolchildren be sent to the 'live show' of Doom Town in 1955 for photo opportunities to best capture their responses.<sup>9</sup> Tapping contemporary preoccupations with suburban affluence, the FCDA transformed a deserted test site into a mannequin-populated town rich in consumer symbols and labels. Mannequins sported the latest fashions while cars were of the latest design. At Doom Town, the FCDA sold the issue of civil defense as a lifestyle choice, and transformed the threat of the bomb into a dark cloud hanging over suburbia.

Out of patriotic duty, corporations volunteered their services. In its annual report to Congress for 1953, the FCDA highlighted the "assistance" of "private industry" at Doom Town I, and that "the participation of industry set a significant precedent" for future civil defense policy. In response to the "limited funds" provided by Congress, the FCDA announced a strategy of "cooperative promotion," whereby staff courted corporate America, inviting companies to assist with a range of civil defense projects.<sup>10</sup> The National Lumber Manufacturers Association helped the FCDA construct "typical American frame homes" at Doom Town I.<sup>11</sup> North American Van Lines Inc. delivered test items free of charge to the site, while Atlas Furniture of Las Vegas contributed home furnishings. Deeming the 1953 test "unfinished," cooperation increased significantly in order to craft a much larger townscape for 1955's Operation Cue.<sup>12</sup> The list of collaborators expanded to include Airstream, Edison Electric, Ford, Kaiser Aluminum, Union Carbide, and Trans World Airlines. Highlighting the new relationship between consumer capital and civil defense, some 150 companies assisted in the process. Doom Town represented a novel marketing

opportunity. Several of the industries sponsored both Doom Town and Disneyland, highlighting their desire to venture into all kinds of promotional landscapes. Disney's Tomorrowland featured TWA's Moonliner rocket and Kaiser's 'Aluminum Hall of Fame' with mascot KAP the pig.

Promoting Operation Cue, second FCDA director Val Peterson explained, "Perhaps one of the most interesting and important aspects of the CD test program this year is the participation of private industry," and related "we are grateful...for the whole-hearted cooperation and support of the many private industries, associations, institutes."13 Industrial cooperation influenced the design of around half the technical projects. Safety Appliances Company provided helmets for field exercise participants (dubbed Desert Rats) while JC Penney provided overalls - the 'Rats' were in turn told to return home with their antics "appropriately publicized," "solely on information given to you by FCDA."14 Even airplanes were loaned.<sup>15</sup> The Administration presented the corporate involvement as both necessary and mutually beneficial. In return for equipment, the FCDA promised "guidance for industrial defense" and "technical information which the industry needs for its own protection."<sup>16</sup> A corporatesponsored Armageddon landscape, Doom Town attested to an intriguing synergy between consumer culture and catastrophe culture. Out in the desert, corporations helped the FCDA turn nuclear disaster into a 'product' to sell to the masses.

The novelty of Nevada's Doom Towns appealed to the nation. The media constructed fake interviews with 'residents', highlighting both the fears and the

fashion choices of mannequin denizens. As if Doom Town was a real town, *American Home, Good Housekeeping,* and *House and Garden* magazines all covered its construction. Newspapers showed plans of the 'atomic town' as well as interior shots of the dwellings. Doom Town became a consumer-based news story. Corporate sponsors advertised their own wares with reference to civil defense and atomic survival. Welcoming the coverage, the FCDA hoped that the experiment would motivate people to defend their own consumer gains against Soviet attack and that Doom Town would serve as a "cue to survival." The Administration exploited the consumer dream for its own civil defense purposes.<sup>17</sup>

### Atomic Suburbia

The Doom Town project reflected growing interest in home ownership, planned communities and urban form in the 1950s West. Experimental 'model homes' at Doom Town, along with glitzy casino-hotels at Las Vegas and themed worlds at Disneyland, reflected a new dynamism in design taking hold in the urban West, such fantasy landscapes indicative of what Findlay describes as an inventive time.<sup>18</sup> On the outskirts of Los Angeles, private developers oversaw the construction of the planned community of Lakewood. Completed in 1953, Lakewood represented one of the first experiments in postwar suburban development. Homing some 70,000 residents, publicist Don Rochlen referred to it as "an instant community." Lakewood embodied a significant (albeit all white) mass-produced housing project, a Levittown of the West. Lakewood's motto read 'Tomorrow's City Today' with realtors welcoming "pioneers on the

suburban frontier."<sup>19</sup> 300 miles away at the Nevada Test Site, pioneers on the atomic frontier constructed the instant community of Doom Town.

Assisted by the American Institute of Architects, the FCDA modeled its 'survival town' on contemporary planning ideas. Doom Town resembled a scaled-down model of Lakewood. It took only a few months to assemble. The sudden rise of Nevada's model city mimicked the accelerated practices of construction pioneered at new suburban developments across the country, as well as the rapid changes taking place at nearby Las Vegas. Providing housing for workers involved in the construction of Hoover Dam in the 1930s, Boulder City, just twenty miles from Vegas, stood as an earlier example of a model community. The latest conveyor belt mentality of home building perfectly suited the need for fast-tracked experimental projects at the Nevada Test Site. Commentators noted the resemblance to the latest housing schemes, labeling Doom Town a "prosperous community" that "stood, proud and white as any new property in suburban USA until 5.20 PST."<sup>20</sup> At Doom Town, suburbia was assembled (then demolished) at record speed.

Allusions to suburbia suited the remits of civil defense. As Andrew Grossman highlights, the "suburban ideal" remained crucial to an "illusion of survival" in the nuclear age. For Elaine Tyler May, "the home represented a source of meaning and security in a world run amok."<sup>21</sup> The FCDA identified suburbia as the nation's best hope for survival in the event of nuclear attack. In a 1953 report, the Administration identified 193 metropolitan areas as 'prime targets' for attack, concluding that most American cities would be lost in nuclear war.<sup>22</sup> In the desire to forge a positive "nuclear reality," settlements outside metropolitan areas became the ideal places to "peddle the illusion of commonplace life" continuing post-war.<sup>23</sup> Associated with conformity, order, and a white majority, the emergent suburban landscape of the 1950s seemed very much in tune with FCDA values and the social conservatism of first director Millard Caldwell, who in his prior role as Governor of Florida had championed segregation and responded to the news of Japanese surrender in World War Two by requesting bars close early in fear of unwelcome "boisterous conduct."<sup>24</sup> The 'containment culture' of suburbia, marked by controlled and predictable lives, allied well with the Administration's hope of a disciplined civilian defense force. FCDA officials also shrewdly recognized suburbanites as the new American majority, thus the most important catchment for both a civil defense message and long-term political support. Suburbia represented the best place to sell FCDA propaganda, as well as the best location for shelters, evacuation routes and a new home front. Suburbia signified a stronger America able to withstand even nuclear attack.

Suburbia symbolized survival; it also symbolized mass consumption. As Lizabeth Cohen elaborates, "suburbia became the distinctive residential landscape of the Consumer's Republic" of postwar America, the true home of "high consumption."<sup>25</sup> At Lakewood, the post-1945 dream included a Waste King 'Pulverator' garbage disposal and Norge refrigerator at home, and a Danny's Donuts (later becoming Denny's) close by. A reinforced delivery tunnel underneath the new Lakewood Center mall served as a fallout shelter for 6,000 residents. At Doom Town, messages of survival linked with modish ideas about consumer innovation and home gadgetry. In Doom Town II, authorities tested a range of indoor shelters. The FCDA promoted the nuclear shelter as another 'room' in a new build, a natural extension of the suburban home. FCDA officials appended civil defense to a growing discourse of home improvement, presenting the fallout shelter as an ideal project for the DIY enthusiast, not that far removed from a garden tree house. Such an enclosed environment afforded a unique opportunity for family time and social intimacy. Rather than social disintegration coinciding with nuclear war, exactly the opposite effect would occur: the bomb would bring family together. The shelter epitomized suburban privacy. Such propaganda reached its zenith in 1959, when national press covered the first honeymoon held in a bomb shelter.

By suburbanizing the bomb, the FCDA also presented it as a domestic threat, "one of many household hazards," that a little DDT spray could make light work of. This tactic downplayed the danger. Guy Oakes remarked, "Fallout [was] presented as if it were light snow descending onto this comfortable middle class haven." Embracing civil defense equated to tackling a domestic pest. The successful homemaker thus represented the ideal candidate to face off the nuclear peril. Famous for her optimistic speeches, FCDA deputy director Katherine Howard promoted "the housewives and homemakers of the land" as saviors of the nation.<sup>26</sup> Propaganda extended female homemaking duties of the 1950s to encompass a Cold War role. Hence, convenience television dinners seemed not that far from gathering stockpiles for survival, while keeping the house clean and tidy served as a way to avoid it burning down in the event of a nuclear explosion. Perfecting home chores and mastering nuclear attack aligned. As noted in the FCDA documentary 'The House in the Middle,' the suburban home with freshly painted white picket fences and tidy backyard epitomized a readiness for 'survival'. Doom Town both exploited and strengthened such imagery.

#### Consumption as Survival

Atomic and consumer culture also aligned at Doom Town. Product placement included all manner of automobiles, television sets and household tins. In the official Operation Cue documentary, journalist Joan Collin highlighted the significance of "the things we use in our everyday lives" on her visit to Doom Town II. The informational, consumer-based film had Collin ask questions about shelters and foodstuffs, while an off-screen male narrator provided the answers, often referencing corporate sponsorship.<sup>27</sup>

Doom Town resembled a huge department store on the brink of Armageddon. Mall culture invaded the Nevada Test Site in the guise of a whole range of consumer products on display, including domestic appliances, home furnishing, lighting and wall art. Similar to a quality control inspector, the FCDA set about testing the merchandise. One press release announced, "Venetian Blinds to be Tested," with the promise that Doom Town data would "furnish important information to the industry." The Venetian Blind Association of America selected the designs to test.<sup>28</sup> Doom Town highlighted a new level of cooperation between the military-industrial complex and consumer-focused corporations, with the promise of survivability through a new era of atomically tuned merchandise.

Pivotal to the survival of a post-war suburban population, food represented the most obvious consumer category to test. Based on the criteria of the "largest volume and most frequent use in the American dietary," the FCDA selected 90 food products for testing at Apple 2, with the aim of finding the best items to survive attack.<sup>29</sup> A range of organizations including the National Association of Frozen Food Packers and Evaporated Milk Association sponsored the experiment. In a period marked by the popularity of the home freezer and television dinner, the inclusion of food preservation tests at Doom Town testified to a new culture of preservation (and the hope of long-lasting products). The idea of food surviving past its natural lifespan by mass refrigeration could arguably be extended through and even beyond radioactive war. Similar to a consumer taste test, an FCDA report on 'Bulk Food Staples' noted how the flavor of some food changed dramatically, while "The artificially fruit-flavored gelatin, chocolate pudding, rice, macaroni, and oatmeal were cooked and tasted and were found to be normal."<sup>30</sup> Within the public dimension of this discourse, the FCDA meshed surviving Armageddon with a culture of contemporary convenience and lengthy shelf-dates. A civil defense 'mass feeding' experiment on site implied that the 'good stuff' would likely survive any situation, with reporter Joan Collin enthusing over the quality of the beef.<sup>31</sup>

The organization revived Grandma's Pantry, an emergency-stocking scheme used in World War Two, reinforcing ideas of the female at home as valued consumer. For Operation Cue, a FCDA press release announced, "Grandma's Pantry Undergoes Test," and detailed how around 80 "cans and jars" would be stored (and exposed) in kitchens and shelters. Previously associated with natural disasters and world conflict, the FCDA hoped that "Grandma's Pantry in homes of the atomic age, may save many thousands of lives."<sup>32</sup> The nuclear shelter took on the shape of one giant storehouse of culinary delights. Pictures of rows of tins at the Doom Town houses attested to this aspect. Nuclear survival connected with nostalgia for past schemes of storage, as well as contemporary fixations with copiousness. The home shelter reinforced a culture of abundance.

Images of Cold War survival also linked with car advertising. Highway construction campaigns of the 1950s situated the automobile as the ideal evacuation vehicle in disaster scenarios. Acknowledging the fact that "the American public owns and operates nearly 40 million automobiles," FCDA's J. Slaten Jenner explained to the press how cars served as invaluable civil defense tools and "focal points" for study.<sup>33</sup> Symptomatic of the new corporate-FCDA alliance, the car industry dutifully offered its assistance. Standard Oil provided gasoline, local garages from the National Automobile Dealers Association loaned their cars. "Proud of the patriotic response of the car dealers," the FCDA promised ringside views of the test and the return of vehicles for display purposes.<sup>34</sup> DL Johnson of Johnson Bros. Chevrolet wrote, "I would like to have my car regardless of the condition it might be in, even if I have to send a truck to haul it back to Dallas."<sup>35</sup> The *Las Vegas Sun* covered the story of 40 high school students in "five spanking new Fords" driving to the test site.<sup>36</sup> At both Doom Towns, cars littered the atomic terrain. Harold Goodwin, FCDA Director of Operations hoped to not only learn how to deploy vehicles during nuclear attack, but how Doom Town might offer "assistance to the automobile industry in increasing protection for passengers in future designs." Goodwin related, "our feeling that the automotive industry has a big stake in automobile behavior under atomic explosion."<sup>37</sup> The bomb promised better standards in road safety and brand quality. As the *New Mexican* reported: "We look forward to next year's automobile advertisements telling us that the Super-Duper 8 absorbs less radiation per horsepower than any other model. Should be a great selling point."<sup>38</sup> Highlighting its faith in American engineering, the FCDA concluded that the US automobile could "hold its own" when faced with the Soviet-designed bomb.<sup>39</sup> A product of the Doom Town tests, the civil defense pamphlet '4 Wheels to Survival' (1955) preached auto-addiction and nuclear survival in equal measure. Corwin Willson, a Flint-based designer even created his own 'mo-tourcar' atomic survival vehicle.<sup>40</sup>

Finally, placement of television sets in Doom Town residences underlined an event designed around media, advertising and the rise of visual culture. An estimated 70 percent of the population watched test Annie on their television sets, with the "dramatic story...relayed to millions." For Operation Cue, the FCDA arranged for NBC and ABC to cover the test, while 20<sup>th</sup> Century Fox gained the rights to produce a movie version 'Survival City' that later played in between 300 and 500 theaters. The *Las Vegas Review-Journal* enthused that: "the world's most expensive premier will be unfolded out on the Nevada desert Sunday, and nothing that Hollywood ever has produced will be able to equal it." The FCDA

reported Operation Cue as the "biggest civil defense television story of the year."<sup>41</sup>

Audio-visual technology helped mold disaster into popular entertainment. The latest time-lapse photography depicted the frame-by-frame collapse of houses in Operation Doorstep in 1953. The slow motion format almost suggested that the action could be paused, stopped or even rewound; the disaster controlled and directed. While the mushroom cloud could be viewed via the cathode ray tube, the inability of film to capture radioactive ions on screen cast the event as less serious. Film limits thus suited the overall message of the FCDA: to play down the radiation danger.

Across the nation, Americans witnessed fabricated scenes of life and death at timber-framed abodes viewed through their wooden-framed television sets. Audiences consumed images of total destruction, episodes of nuclear war, as interrupts to *I Love Lucy* and *The \$64,000 Question*. They watched an early form of 'reality tv' based around mannequins in survival town. While ABC's weekly 'Disneyland' TV show advertised an exciting new entertainment landscape in Anaheim, the FCDA marketed a new kind of atomic landscape in Nevada. The screen served as a consumer filter on proceedings, with the FCDA providing a heavily mediated image. Like the 'visa-door' oven of the period, people peered in.

Along with science fiction movies, atomic cocktails and records such as "Jesus Hits Like an Atom Bomb" by Lowell Blanchard and the Valley Trio, Doom Town contributed to a fresh narrative landscape that cast the bomb as consumer entertainment. In nearby Las Vegas, a range of new hotel-casinos opened on the strip, including the Desert Inn, the Sahara, and the Sands that welcomed the atomic test series as a novel way to increase business. The Chamber of Commerce published a shot calendar for visitors, while individual casinos advertised their own atomic-themed pool parties and beauty pageants. Atomic culture swept the town. One reporter noticed how "Even beer glasses look like an atomic explosion."<sup>42</sup> Treating the military site as a satellite of the fast-expanding gambling business, casino proprietors advertised the atomic series as a gratis firework display, while, as Eugene Moehring and Michael Green explain, local politicians "viewed the spectacular aboveground tests as another spur to development."43 Scheduled for late April 1955, Doom Town II joined a Motorola convention, golf's Tournament of Champions, and the Archie Moore-Nino Valdes prizefight as competing attractions for tourists on the strip. The Las Vegas Sun called it "the greatest jam of visitors in Las Vegas history."44 The delay of the test frustrated hotel staff that had already allocated room bookings based around the multiple events. With fears of the "audience quitting" Operation Cue, Copa showgirl Linda Lawson emerged at the Sands Hotel crowned 'Miss-Cue,' complete with mushroom cloud hat (Lawson went on to a successful film career).<sup>45</sup> Miscues aside, Doom Town aligned well with the Vegas-ization of the bomb, strengthening the growing sense of nuclear testing as a source of novelty and consumer interest.

The FCDA mannequins out in the desert ultimately signified the same thing as pink flamingos on picket-fenced lawns across suburbia and Vegas Vic waving at

casino guests: statements of American consumer culture and entertainment edifice. The time-lapse photography and instant boom and bust of Doom Town squared with a new postwar world of high technology and speedy reinvention. A world marked by "the pushbutton way to leisure," as *Better Homes and Gardens* titled it, was equally a time of the push button to Armageddon. There seemed little to separate the wealth of new technologies. Even the nomenclature was shared. The epithet 'gadget' applied to both the first atomic bomb and the latest household convenience.<sup>46</sup>

#### Dioramas of the Cold War

Such consumer labels operated within an underlying Cold War framework. In a 1951 satirical essay 'Nylon War' sociologist David Riesman declared the Cold War a conflict of symbols of consumption. Riesman described a fictitious bombing of the Soviet Union with consumer goods triumphing the American way; a US launched offensive codenamed 'Operation Abundance.' Operation Doorstep and Cue represented the 'home front' of this offensive, and the advent of a militarized consumer landscape. The model homes at Doom Town followed the same kind of logic.<sup>47</sup>

Showcased on home television and across newspaper front pages, Doom Town functioned as a very public Cold War exhibit. A memo from FCDA's Richard Hirsch revealed, "plans to expose to nuclear detonation a series of items of demonstration value."<sup>48</sup> Doom Town joined other 'demonstration' landscapes of the period. World's Fairs promoted 'white cities' of high technology fuelled by capitalist development. At the Century 21 Exposition in Seattle 1952, visitors took a 'Bubbleator' glass elevator to the 'world of tomorrow', exiting a fallout shelter for the welcoming image of Marilyn Monroe. At the consumer playground of Disneyland, the Monsanto-sponsored 'House of the Future,' featured an 'Atoms for Living Kitchen' complete with microwave and ultra-sonic dishwasher. Talk of energy too cheap to meter, nuclear-powered kitchen toasters and high technology worlds situated the future as consumer-based and nuclearengineered. Eisenhower's Atoms for Peace promised white picket fences as well as the turning of swords into ploughshares and pruning shears.

Placing American goods in the face of Soviet aggression, the Doom Town experiment shared much in common with the 'typical American home' showcased at the American Exhibition in July 1959, held at Sokoliniki Park, Moscow. The Exhibition displayed the best of American consumption, and like Doom Town, included, "the houses, the groceries, the fancy cars, the pretty clothes...of individual Americans." Both exhibit and townscape featured the latest lifestyles, fashions, food, kitchens, gadgets, and automobiles of the period. While Sokoliniki featured 22 of the latest US manufactured cars, Doom Town featured 51. Both exhibits pandered to the sensibilities of affluent, white middle class families. They functioned as propaganda landscapes, selling the American dream as the epitome of freedom through consumer choice. Offered as aspirational living, both models attested to the "triumph of capitalism." Elaine Tyler May declared "the suburban home...as a powerful weapon in Cold War propaganda arsenal," a tool deployed both at home and abroad. The same kind of branded goods made their way to both the USSR and Doom Town, consumer products enrolled in fighting the Cold War diplomatically and on the imagined battlefield of the home front.<sup>49</sup>

The American Exhibition and Doom Town also functioned as landscapes of conflict. Looking across the consumer divide at Sokoliniki, President Richard Nixon and Premier Nikita Khrushchev debated the relative merits of capitalist and communist systems. They sparred over kitchen appliances as opposed to nuclear devices. Their exchange of consumer-based words as opposed to plutonium-based weapons highlighted the Cold War as a consumer war, with home ownership and quality of life key areas of conflict. Confident in US domestic superiority, Nixon jousted, "Would it not be better to compete in the relative merit of washing machines than in the strength of rockets?" On a visit to California, Nikita Khrushchev later quipped about rockets being secretly hidden at Disneyland. Together, the items at Sokoliniki, "the decade's most powerful icons, the things everybody thought about first when that lifestyle came under attack," represented a highly cherished way of life. Doom Town equally modeled the success of America. It provided a powerful symbol of what could be won in the Cold War. Both exhibits functioned as time capsules of successful capitalism, with a ticking time bomb placed alongside them, to foster appreciation and protection.50

Much of the media interest in Doom Town surrounded its detailed recreation of American life. Attention focused most of all on its residents scattered across the town site in a variety of poses. On a basic level, the Doom Town mannequins served as signifiers of the American populace, fiberglass facsimiles of home dwellers. Cast in a range of domestic settings, the residents of Doom Town looked and even behaved akin to their real-life suburban counterparts. They dined, partied and hid from Armageddon. On a scientific level, the dressed mannequins provided the FCDA with information on the best textiles for survival, data subsequently passed onto the clothing industry as part of the government/corporate nuclear relationship. On an instructional level, the dummies highlighted shelter opportunities in the home and survival basics. The in-animation of the dummies led to the classic FCDA warning, "or will you, just like a mannequin, sit and wait." JC Penney featured the civil defense tagline in their store advertising.<sup>51</sup>

The FCDA used the dummies to advertise American freedom, individualism and self-reliance through consumer choice. Designed with the department store in mind, post-war mannequins existed in the marketplace with a purpose to sell. At Doom Town, they entered a new realm of merchandising. Part of the furniture of an atomic suburbia, the Doom Town dummies wore the latest fashions and advertised 'the nuclear family'. They functioned as potent symbols not just of people, but of consumption too. The nuclear mannequins functioned as colorful avatars of the American economy. Mannequins in shop windows served as cyphers or placeholders: people looked in and saw themselves in new clothes. Likewise, thanks to the mannequins, Americans visualized themselves in the homes of Doom Town.

It was specifically the mannequins manufactured by DG Williams that served as the ambassadors and foot-soldiers of 1950s American capitalism in commercial exhibitions in the USSR and, crucially, in Doom Town. These new, post-war dummies displayed none of the austerity or down beat expressions of their Depression-era or wartime counterparts. They instead sported fresh smiles, oozed femininity and extravagance, and sold new clothing ranges, epitomized in Dior's New Look. Louisa Larocci described the "veritable armies of mannequins both in the interiors of stores and their windows." Gene Moore fashioned moviestyle window dramas for Bonwit Teller then Tiffany's on Fifth Avenue. Doom Town resembled a scaled up store window, an atomic diorama to rival Moore's best window dressing. LA Darling Company of Michigan provided the mannequins for the atomic townscapes. Treating them like department store models, JC Penney dressed each dummy in the latest clothing at a cost of over \$2500. Clothes transformed the Doom Town mannequins into individuals with personality. Evidence that style and fashion came above any experimental purpose, one 1955 model, placed next to a larder, even wore a bikini (at least on some level a fitting garment given its link to nuclear history). Combining fear with fashion, JC Penney used the Doom Town mannequins to advertise its wares. The department store warned of being unprepared for nuclear attack ("These mannikins could have been live people, in fact, they could have been you!"), while equally highlighting how "No two mannequins dressed alike." For the retail corporation, the bomb provided a fresh advertising opportunity. In the article "Great Atomic Bomb Sale Due Today," Las Vegas store manager Hillman R. Lee related how the fabrics tested at Doom Town might also prove "a powerful factor in deciding fashion trends in years to come." Another press article told of how "All known varieties of American clothing, excepting a mink coat, have been placed on the mannequins...warnings how to dress in these atomic times."52

The connection between the Doom Town dummies and their department store origins continued after the tests, with the return of mannequin survivors (40 out of 50 in Operation Doorstep) to LA Darling "for a nationwide tour of department stores." Manufactured celebrities of the nuclear age, the Doom Town mannequins first went on display in JC Penney's Las Vegas store just two weeks after test Annie before being paraded in Los Angeles and other cities. As if Marilyn Monroe blond bombshells of atomic culture, the mannequins perfectly captured the artificial beauty of the age, the neon and the nuclear.<sup>53</sup>

In many ways, the mannequins of Doom Town resembled the audio-animatronic residents of Disneyland--another simulacra of American life cast in anodyne, even clinical detail. Dummies populated the two environments: the key difference being that Disney's moved thanks to animatronics, while at Nevada a mushroom cloud shifted limbs. Working with inflexible forms, the FCDA animated its store mannequins as best it could, placing them in 'action' poses of dining, driving and ducking for cover, some taking shelter from the blast, others left out in the open. The presence of artificial residents at both places completed the picture of American life, but also gave the landscapes a fantastical, unreal quality: an almost surreal aesthetic.

The well-dressed, anatomically identical mannequins also reminded of stereotypical images of clean-dressed men and women in 1950s advertising, of the 'organization man' described by William H. Whyte and the homely 'domestic goddess'. Urbanist Lewis Mumford critiqued the sameness of American life in the 1950s, "a multitude of uniform, unidentifiable houses, lined up inflexibly, at uniform distances, on uniform roads, on a treeless communal waste, inhabited by people of the same class, the same income, the same age group." Like American advertising of grey-flannel suited men of the day, the Doom Town dummies all looked roughly the same. Their plastic smiles reflected a suspected façade of contentment in the period identified by Betty Friedan and David Riesman. The FCDA documentary for Operation Cue highlighted superficial damage to the clothing of Doom Town residents, with one "young man" simply suffering a "charred and faded…outer layer of his new dark suit," but the real superficiality lay within.<sup>54</sup>

Placed in everyday rituals such as mealtime and evening television, the Doom Town mannequins reinforced the notion of the 1950s nuclear family and its consumer lifestyle. A voguish term coined in 1947, the nuclear family not just described a two child family, but carried with it connotations of American pride, material wealth and success. Associating Doom Town with the nuclear family linked the experiment with one of the most powerful labels of the period. Doom Town paralleled other popular advertising in the period, as corporations rushed to exploit the family image to sell everything from Oldsmobile cars to new kitchen appliances. At the Nevada Test Site, a mannequin man in a grey flannel suit, accompanied by a plastic housewife, and two quiet children, effectively visualized the nuclear family ideal. The government agency attempted to sell both the nuclear family and its postwar survival, forging a backstory to the township and hoping that the nation would watch with empathy and emotional investment. In press coverage, Doom Town residents went by the names of Mr. and Mrs. America and the Darling family. Life seemed representative and everyday. The *San Antonio Express* headlined "'Happy Family' Awaits A-Bomb," describing, "two young couples... chatting over after dinner coffee, totally unaware they are soon to feel some of the effects of the world's most destructive weapon." On a deeper level, Doom Town contributed to an ongoing dialogue over the meaning of the nuclear family in the Cold War period. Elaine Tyler May defined the "powerful image of the nuclear family in the nuclear age: isolated, sexually charged, cushioned by abundance, and protected against impending doom by the wonders of modern technology." Doom Town drew together and tested such notions of isolation, abundance and protection.<sup>55</sup>

In its simulation of 'everyday America' and suburban living, Doom Town amounted to an impressive consumer spectacle. The mannequin consumers of Doom Town complemented the increasing commerciality of period atomic culture. Similar to mannequins in store windows, Doom Town was part of the 'visual merchandizing' of the bomb in the 1950s, of 'brand atom'. Incorporating the bomb into a framework of consumption, the FCDA sold the atom as something every American could relate to. It attempted to insert the bomb into everyday consumer life. It also allied Doom Town (and with it, broader civil defense) with a specific consumer narrative of the bomb: victory through purchase. Along with other propaganda pieces of the period, at Doom Town the FCDA suggested that by being a good consumer, you could survive attack. With the right choice of freshly built suburban homes, fallout shelters, the latest cars, textiles and fashions, Americans could buy survival. The consumer world could actively save lives. Civil defense appeared a product on sale. As if a statement of faith in American consumption, the FCDA's Katherine Howard kept a dinner plate and cookbook from the debris of the 1953 Doom Town, offering them to her audiences as "intact symbols of family survival."<sup>56</sup> Mementos of Armageddon, the plate and cookbook testified to a consumer world capable of outlasting radioactive decay. Consumer America seemed stronger than the Soviet A-bomb.

#### Destroying the Consumer Spectacle

After constructing Doom Town as a simulacrum of American consumer life, the FCDA then blew it up. In reports to Congress, Operation Doorstep and Cue were offered as highlights of the Civil Defense programme. According to Caldwell, "National interest...was greatly stimulated" by Doorstep. Doom Town I demonstrated "for the first time" to the American public both the "power" of the bomb and "survival," while the 1955 test underlined the need to act, that, "Seeing what an atomic explosion can do, many more Americans were awakened to the critical need for civil defense preparedness."<sup>57</sup>

However, the much-anticipated home front never materialized. "Americans were told to turn their imagination of doom into mental readiness, to transform their fear into action," explained McEnaney.<sup>58</sup> Val Peterson labeled Doom Town II "Our cue for a renewed effort" at civil defense.<sup>59</sup> Instead inaction dominated. The destruction of model America failed to motivate Americans to act. As Garrison claims, "Civil Defense propaganda was a massive failed federal effort to control public perception," with Doom Town just another example of disappointment.<sup>60</sup> Captioning photographs of a Doorstep building, the FCDA reported, "Millions of Americans learned from these pictures," but questions remained over what exactly they learned.<sup>61</sup> Meant to test hypotheses about survivability during nuclear attack, Doom Town failed to offer clear guidance over what to do, and instead bred hopelessness. Rated against the original brief of the FCDA, to 'minimise loss, fear and panic', to foster 'high morale,' 'fuel participation;' and 'maximise public effort,' Doom Town seemed more a failure than a victory. Designed to tackle "defeatism" and "confusion" within the public sector, Doom Town more likely added to it.<sup>62</sup> Critical of the event, civil defense director for Illinois General Robert M. Woodward dismissed Operation Cue as a "lot of big ballyhoo" and "a waste of energy" that added "very little if any value" to the home front.<sup>63</sup>

The consumer angle contributed to the 'big ballyhoo' and failure of message. Most obviously, Doom Town depicted the total destruction of the consumer dream and left questions over whether anyone or anything could survive nuclear attack. Cameras captured frame by frame the obliteration of buildings. Newspapers catalogued the damage. The *Albuquerque Journal* described how the Apple 2 detonation, "cut a swathe of destruction through Doom Town Thursday like a monstrous fiery scythe," and left no survivors, while at Annie, a mannequin's shoe blew off to be found 7 miles out.<sup>64</sup> Meant to visualize themselves as Doom Town dummies, audiences witnessed the loss of picket fences, suburban homes, and the 1950s dream. While across the state border, Disneyland insulated its visitors from nuclear threat, the explosion at Doom Town in Nevada provided a rude interruption to the consumer bliss of the period. The FCDA underlined the atom as an uninvited guest, ruining the "silent dinner party in progress in the dining room of the house at 7,500 feet from ground zero." Traditionally the source of aspirational living in the 1950s, the FCDA placed the nuclear family perilously on the brink of Armageddon at Doom Town. One reporter told of "children at play unaware of approaching disaster," another witnessed: "a mannequin mother blown to bits as she spooned baby food to her department store dummy infant." As one Doom Town family member purportedly exclaimed: "I'll bet Superman or Davy Crockett would have been scared."<sup>65</sup>

Watching the disaster unfold, most Americans felt powerless. As the FCDA annual report for 1955 noted, Doom Town "brought vast numbers of Americans face to face with the enormity of the problem of survival in the nuclear age," with "damage and casualties far beyond the resources of any community."<sup>66</sup> At 35 kiloton rather than 10 megaton, Apple 2 promised a 'small' explosion compared to a real scenario, but American Legion member Mrs. Rae Ashton from Bountiful, Utah relayed her total shock: "it was hardly a household teaspoonful of a bomb," and "I felt spun like a child's toy top." Even Val Peterson confided, "I felt like I was on top of a tremendous pile of jelly."<sup>67</sup> Images of a wrecked suburban landscape questioned the idea of survival offered by the FCDA. The FCDA booklet 'Survival Under Atomic Attack' (1951) preached, "You can survive," highlighting "your chances of making a complete recovery are much the same as for everyday accidents." Doom Town far from resembled an everyday accident. The scale of destruction also highlighted the ineffectiveness of 'the everyday' to soften an attack. Even the FCDA privately acknowledged the limited protection afforded by household consumer items. One technical report read "Car 50, after the blast. Top severely dished, some windows broken, hood blown open. The mannequin driver had a crushed head."<sup>68</sup> Rather than backing four-wheels to survival, Doom Town functioned more as an auto-geddon landscape. Spectators witnessed the destruction of Detroit's finest, America's engineering icons, before the atomic bomb. Reflecting growing skepticism toward nuclear testing, the press underlined the negative imagery, especially at Operation Cue. The *Wyoming Eagle* mused, "it is a fearful thing to know that man has the power to destroy instantly thousands of persons, buildings, and belongings, and leave no trace of their existence."<sup>69</sup> Starting out as a symbol of the good life, Doom Town turned into a powerful metaphor of loss.

The relationship between bomb, media and consumption thus took on narrative directions that the FCDA failed to manage or predict. Doom Town undermined the dominant paradigms of the era. Its destruction showed how easily the consumer gains of the period might disappear. The FCDA experiment highlighted the fragility of the consumer dream. It showed an unwelcome vulnerability embedded in materialism. At the American Exhibition, Khrushchev challenged Nixon over the benefits of capitalism, claiming that American products were simply not mean to last. At Doom Town, the American consumer world dissolved in a matter of seconds. The bomb consumed everything. Doom Town failed "to show [the] way to survival" anticipated by both the FCDA and the press.<sup>70</sup> It reinforced images from Hiroshima and Nagasaki that projected the bomb as an instrument of total destruction. The FCDA replaced a bomb exploding over a Japanese city with a mushroom cloud hanging over a partly vaporized American suburbia. The press contributed to the creative process, packaging Doom Town into a homegrown 'horror story,' a veritable 'shocker.' Touring the 1953 site, news reporter Elton Fay felt the eerie quality of Doom Town: "Outside it is bright sunshine...But the moment you step inside, the feeling of bright sunshine vanishes. It is a house of death."<sup>71</sup> The Los Angeles *Times* labeled Doom Town II a "terror town."<sup>72</sup> Like the radioactive monster movies of the period, television showed dummies coming out of the desert mutated and scary. The second Doom Town even coincided with the release of the B-movie Them! The mannequins themselves morphed into totems of nuclear horror. They denoted the visual power in the disfigurement process of the bomb. Bodies lay in distorted, disturbing and unnatural poses. The voyeuristic interest in Doom Town events contributed to a growing fascination with destruction in the Cold War popular psyche. Rather than buying into civil defense, Americans watched Doom Town as consumers of images of 'atomic death'.

### The Civil Defense Paradox

Doom Town ultimately highlighted the flawed approach of the FCDA to civil defense. Since inception, the Administration had approached the task by selling 'dual realities' to the American public, publishing scenarios of death alongside reassuring statements of survival. The FCDA reprinted and distributed *Look* magazine's shocking piece "We're Wide Open for Disaster" while also promising survival with Bert the Turtle.<sup>73</sup> Similarly, the FCDA aimed with Doom Town to "make the threat of the mushroom cloud a dark reality across the nation," yet equally lauded it as 'Survival Town'.<sup>74</sup> Placed together at the same physical location, the two impulses (and messages) could not be reconciled. Captured in the *San Antonio* newspaper headline "'Happy Family' Awaits A-Bomb" was the sense of extremes and contradictions, of perfect 1950s consumer bliss giving way to Armageddon. The suburban idyll composed at the beginning of the Doom Town experiment seemed at complete loggerheads with the broken cars at its the end. The FCDA furnished its own visual paradox, and contributed to its own failure to secure a workable national defense programme.

Adding a consumer dimension only heightened the confusion, and thwarted FCDA success. The traditional Cold War message of the 1950s was strength through consumer goods. Material abundance equated with victory. Yet at Doom Town, the consumer world was found wanting. Broken appliances and overturned vehicles equated with failure. Pictures high in social realism depicted the nuclear family dismembered. With Operation Alert, a simulated attack on US soil in 1954 (scheduled between Operation Doorstep and Operation Cue), the FCDA described the "post-attack scenario that featured white, middle-class, suburban families, all exceedingly clean, emerging from the holocaust with calm resolve, carefully combed hair, and freshly laundered clothes."<sup>75</sup> At Doom Town, the post-attack scenario looked very different in composition: mutated and deformed mannequins emerging bewildered and disheveled. The FCDA contradicted its own message.

Ironically a town populated with plastic mannequins provided too much realism to handle. The fake Doom Town residents made the Cold War seem too tangible and vivid. The FCDA thought that "Without an American experience of a real atomic attack, planners needed to create a vivid but not horrific snapshot of what one would look like in order to create a psychological climate that facilitated selfhelp."<sup>76</sup> The New York Times rightly pondered: "The main emphasis has been on the frightfulness and awesome destructive powers of the A bomb. But could not this emphasis tend to promote an almost fatalistic attitude?"77 The Portsmouth *Times* likewise raised the issue of fatalism shaping American views of the atom (which it labeled 'fission-osophy').<sup>78</sup> With its images of 'dying' Doom Town dummies, the FCDA went too far in forging a 'snapshot' of Armageddon. As one witness in the FCDA pamphlet "A Housewife watches the A bomb" explained, "I saw a stairway to Hell...and it made me cry."<sup>79</sup> Rather than a Civil Defense booster, Doom Town provided a route towards disaffection with the bomb. It provided an early example of nuclear 'realism' and 'fatalism' combined, and an image of doom difficult to feel positively about.

<sup>&</sup>lt;sup>1</sup> Lloyd Norman, "Atom Show Fizzles Despite Top Billing," *Salt Lake Tribune* May 2, 1955; "Operation 'Mis-Cue' to Make Debut Today – If Everything Goes Okay!" *Las Vegas Sun* May 1, 1955.

<sup>&</sup>lt;sup>2</sup> John M. Findlay, *Magic Lands: Western Cityscapes and American Culture After 1940* (Berkeley: University of California Press, 1992), 298-9. On Disneyland, see Karal Ann Marling, ed., *Designing Disney's Theme Parks: The Architecture of Reassurance* (Paris: Flammarion, 1997) and Janet Wasko, *Understanding Disney* (Cambridge: Polity Press, 2001).

<sup>3</sup> See Paul Boyer, By the Bomb's Early Light: American Thought and Culture at the Dawn of the Atomic Age (Chapel Hill: University of North Carolina Press, 1985), Margot Henrikson, Dr. Strangelove's America: Society and Culture in the Atomic Age (Berkeley: University of California Press, 1997), A. Costandina Titus, Bombs in the Backyard: Atomic Testing and American Politics (Reno: University of Nevada Press, 2001), Richard Miller, Under the Cloud: The Decades of Nuclear Testing (Two-Sixty Press, 1986), Scott Zeman and Michael Amundson, eds., Atomic Culture: How We Learned to Stop Worrying and Love the Bomb (Boulder: University Press of Colorado, 2004), Spencer Weart, Nuclear Fear: A History of Images (Cambridge MA: Harvard University Press, 1988), and Scott Kirsch, "Watching the Bombs Go Off: Photography, Nuclear Landscapes, and Spectator Democracy," Antipode 29/3 (1997), 227-55. For further information on civil defense, see: JoAnne Brown, "A is for Atom, B is for Bomb: Civil Defense in American Public Education, 1948-1963," Journal of American History 75/1 (1988), 68-90, Laura McEnaney, Civil Defense Begins at Home: Militarization *Meets Everyday Life in the Fifties* (Princeton: Princeton University Press, 2000), Dee Garrison, Bracing for Armageddon: Why Civil Defense Never Worked (Oxford: Oxford University Press, 2006), Andrew D. Grossman, Neither Dead Nor Red: Civilian Defense and American Political Development during the Early Cold War (New York: Routledge, 2001); Guy Oakes, The Imaginary War: Civil Defense and American Cold War Culture (New York: Oxford UP, 1994), Kenneth Rose, One Nation Underground: The Fallout Shelter in American Culture (New York: New York University Press, 2001). On Doom Town, see Andrew Kirk, "Rereading the Nature of Atomic Doom Towns," Environmental History, 17 (2012), 635-47, Joseph Masco, "Target Audience," Bulletin of the Atomic Scientists 64/3 (2008) 22-31, and Angela Moor, "Selling Civil Defense: The Politics and Commerce of Preparedness, 1950-1963," MA Dissertation (unpublished), University of Nevada, Las Vegas (Aug 2008).

<sup>4</sup> FCDA, Annual Report (1951), front page, vii (US Govt Printing Office).
<sup>5</sup> Jean Ponton et al, "Shot Apple 2: A Test of the Teapot Series" technical report, Nov. 25, 1981 DNA 6012F; FCDA, Annual Report (1955), 72.

<sup>6</sup> McEnaney, 30; Moor, 10; Civil Defense Cards (1951), (US Govt. Printing Office), Clark County Civil Defense Records, MS28, Nevada State Museum (NSM).
<sup>7</sup> FCDA, "Operation Cue" handbook (Spring 1955), 23, NV0143768. Also noted in Statement by Virgil L. Couch, Industrial Office, FCDA, "Operation Cue Will Provide Guidance for Industrial Defense," Apr. 25, 1955, NV0143689. (All NV documents held at the Nuclear Testing Archive, Las Vegas).

<sup>8</sup> FCDA, Annual Report (1951), x; Annual Report (1955), 78-9.

<sup>9</sup> "Operation Tot-Tag", Freeman Company, Beverly Hills (undated), MS28.
<sup>10</sup> FCDA, Annual Report (1953), 59, 74.

<sup>11</sup> FCDA, "Houses to be Exposed to Atomic Bomb Blast," Press Release, Mar. 5, 1953, MS36.

<sup>12</sup> "Operation Doorstep: Summary Report," Apr. 22, 1953, NV0103721.

<sup>13</sup> FCDA, "Operation Cue" handbook (Spring 1955), III, NV0143768.

<sup>14</sup> FCDA, "Desert Rat Handbook" (1955), 10, NV0143427.

<sup>15</sup> Joint Office Press Release, "Aircraft Join Forces to Deliver Shot Message" (1955), NV0143705.

<sup>16</sup> Statement by Couch; FCDA, "Operation Cue" handbook, 23.

<sup>17</sup> FCDA, "Cue for Survival" Report (1955), NV0051209.

<sup>19</sup> City of Lakewood, *The Lakewood Story: History, Traditions, Values* (2004), 42, 39.

<sup>20</sup> Bob Considine, "Dusty Road to Lingering Death," *New York Journal-American*, Mar. 18, 1953.

<sup>21</sup> Grossman, 76; May, 26.

<sup>22</sup> FCDA, "Target Areas for Civil Defense Purposes" Report (1953).

<sup>23</sup> Grossman, 50, 53.

<sup>24</sup> Governor Millard F. Caldwell, "V-J Day Proclamation," Aug. 10, 1945, Florida Division of Elections, Proclamations and Executive Orders, 1845-1995, Series S13.

<sup>25</sup> Lizabeth Cohen, *A Consumer's Republic: The Politics of Consumption in Postwar America* (New York: Random House, 2003), 195.

<sup>26</sup> McEnaney, 74; Oakes, 122, 140.

<sup>27</sup> Civil Defense Films, "Operation Cue" (1955), NV0800033.

<sup>28</sup> Joint Office of Test Information, Press Release, "Venetian Blinds to be Tested" (1955), NV0143659.

<sup>29</sup> Joint Office of Test Information, "Program 32: FCDA Food Test Results," May 5, 1955, NV0143739.

<sup>30</sup> Sumner Rowe, "Project 32.1 Effects of Nuclear Explosions on Bulk Food Staples," Dec. 14, 1956, NV0011607.

<sup>31</sup> Civil Defense Films, "Operation Cue" (1955).

<sup>32</sup> Joint Office of Test Information, Press Release, "Grandma's Pantry Undergoes Test" (1955), NV0143704.

<sup>33</sup> "Brand New Autos Will Be Exposed to Atomic Blast," *Albuquerque Journal*, Mar. 8, 1953.

<sup>34</sup> "TVers to View Atomic Bomb Damage," *Las Vegas Review-Journal*, Mar. 3, 1953.

<sup>35</sup> D.L. Johnson, Johnson Brothers Chevrolet, Dallas to Cy Crandall, CD Director Las Vegas, Mar. 31, 1953, MS36.

<sup>36</sup> "Students on Atomic Car Convoy," *Las Vegas Sun*, Mar. 3, 1953.

<sup>37</sup> Harold L. Goodwin, Director, FCDA Operations Staff, "Description of FCDA Technical Program" (undated), NV322750.

<sup>38</sup> "Good selling points," *New Mexican*, Mar. 9, 1953.

<sup>39</sup> FCDA untitled report (1953) excerpt, MS36.

<sup>40</sup> "Family Automobile Groomed For Use as A-Bomb 'Shelter'," *Christian Science Monitor*, May 13, 1953.

<sup>41</sup> FCDA Annual Report (1953), 1; *Las Vegas Review-Journal*, Apr. 24, 1955; FCDA Annual Report (1955), 77.

<sup>42</sup> "Vegas Varieties," *Las Vegas Review-Journal*, Mar. 15, 1953.

<sup>43</sup> Eugene P. Moehring & Michael S. Green, *Las Vegas: A Centennial History* (Reno: University of Nevada Press, 2005), 136; Titus, 92-3.

<sup>44</sup> "Heaviest Week in Vegas History," *Las Vegas Sun*, Apr. 23, 1955.

<sup>45</sup> "Audience Quitting A-Bomb Play," *Las Vegas Review-Journal*, May 3, 1955; *Albuquerque Tribune*, May 2, 1955.

<sup>46</sup> Karal Ann Marling, *As Seen on TV: The Visual Culture of Everyday Life in the 1950s* (Cambridge: Harvard UP, 1994), 266.

<sup>&</sup>lt;sup>18</sup> Findlay, 6-7.

<sup>47</sup> David Riesman, "The Nylon War," (1951), in *Abundance for What? And Other Essays* (Garden City, NY: 1964). See also, Greg Castillo, "Domesticating the Cold War: Household Consumption as Propaganda in Marshall Plan Germany," *Journal of Contemporary History* 42/2 (2005), 261-88.

<sup>48</sup> Richard Hirsch, to Mr E.B. Staats, "FCDA Proposal" US Govt Memo, Jan. 4, 1954, NV311484.

<sup>49</sup> Marling, 250; Elaine Tyler May, *Homeward Bound: American Families in the Cold War Era* (New York: Basic Books, 2008 [1988]), 8, 154.

<sup>50</sup> Marling, 250.

<sup>51</sup> Operation Cue doc.

<sup>52</sup> Louisa Larocci; Visual Merchandising: The Image of Selling (Ashgate, 2013), 106; "Copy for J.C. Penney's Double Page Display" (undated), NV0033467; Bob Considine, "Great Atomic Bomb Sale Due Today," Los Angeles Examiner, Mar. 15, 1953; Bob Considine, "Everything's Set for Big Atomic Test," Las Vegas Review-Journal, Mar. 17, 1953.

<sup>53</sup> Joint Test Information Office, Press Release, Las Vegas, Mar. 24, 1953, NV0322551.

<sup>54</sup> Lewis Mumford, *The City in History* (New York: Harcourt Brace, 1961), 486; Operation Cue doc.

<sup>55</sup> Joint Test Information Office, Press Release, Mar. 24, 1953, NV0323982;

"Happy Family' Awaits A-Bomb," *San Antonio Express*, Mar. 16, 1953; May, 1. <sup>56</sup> McEnaney, 4.

<sup>57</sup> FCDA, Annual Report (1953), 1, 3; FCDA Annual Report (1955), 45.

<sup>58</sup> McEnaney, 5.

<sup>59</sup> "Atomic Test Gets Elaborate Plans," *New York Times*, Apr. 17, 1955; Peterson spoke of a "Cue for a new effort" and the need for a "better job" at an Operation Cue briefing session, NV0143670.

<sup>60</sup> Garrison, 13.

<sup>61</sup> FCDA, Annual Report (1953), 58.

<sup>62</sup> FCDA Annual Report (1955), 72.

<sup>63</sup> "Civil Defense Atomic Test is Ballyhoo, General Says," *Rocky Mountain News*, May 4, 1955.

<sup>64</sup> "Most Residents of Blasted Town Would Have Died," *Albuquerque Journal*, May 7, 1955; "Observer Loses Show from Atomic Blast," *Albuquerque Journal*, 20 Mar. 20, 1953.

<sup>65</sup> FCDA, "Operation Doorstep Preliminary Report" (1953), 24-5, NV0014434; Archie Teague, "Dust Piles Over 'Dead' In Nevada's Doom Town," *Las Vegas Review-Journal*, 8 May, 1955; "'Happy Family'"; "Editor Interviews Survivor," *Las Vegas Review-Journal*, 7 May, 1955.

<sup>66</sup> FCDA Annual Report (1955), 6.

<sup>67</sup> "Just a 'Teaspoon' Bomb Still Hard to Believe," *Albuquerque Journal*, Mar. 18, 1953; "CD Chief Crouches in Foxhole," *Las Vegas Review-Journal*, Mar. 18, 1953.
<sup>68</sup> Op. Doorstep Prelim. Report, 17. The simulated suburban landscape of Apple 2 also included a trailer park. See Joint Office of Test Information, "How Trailers Will be Exposed in Test," (1955), NV0143663.

<sup>69</sup> Editorial, "An Awesome Thing," *Wyoming Eagle*, Mar. 19, 1953.

<sup>70</sup> Archie Teague, "Doom Town To Show Way To Survival," *Las Vegas Review-Journal*, 22 Apr., 1955.

<sup>71</sup> Elton Fay, "Eerie Chill as Homes Wait Blast," *Las Vegas Review-Journal*, Mar. 16, 1953.

<sup>72</sup> Los Angeles Times, Apr. 25, 1955.

<sup>73</sup> FCDA reprint, Fletcher Knebel, "We're Wide Open for Disaster," *Look* 13/5 Feb. 27, 1951, MS 28.

<sup>74</sup> Operation Doorstep doc.

<sup>75</sup> Garrison, 71.

<sup>76</sup> McEnaney, 28.

<sup>77</sup> Jack Gould, "Television in Review: Yucca Flats…" *New York Times*, Mar. 18, 1953.

<sup>78</sup> "Fission-osophy," *Portsmouth Times*, Mar. 18, 1953, MS36.

<sup>79</sup> Missouri Civil Defense Agency, "A Housewife Watches the A Bomb" (undated) MS36.