

Annotations in the margins provide an overlay of personal and academic reflections on the occasion of the agency's ten-year anniversary.

### ABOUT THIS DOCUMENT

The National Toxic Land and Labor Conservation Service ("National TLC Service") is pleased to deliver this report summarizing the history of the agency, discussing our operations within the current state of

atomic commemoration, and reporting real progress in fulfilling the long-term goal of collaboratively rerouting Cold War public memory. The last decade has witnessed periodic spikes in public concern over nuclear security and a steady increase in awareness of the toxic legacies faced by Indigenous communities alongside the largest new investments in warheads weapons delivery systems since the end of the Cold War.

# **OPERATIONAL DISCLOSURE**

In a rare display of bipartisan cooperation and as testament to the value placed in our mission, U.S. Congress maintained the National TLC Service's annual appropriation of approximately \$0 across three presidential administrations, from the agency's founding in 2011 through fiscal year 2021. This budget, supplemented by personal funds, the labor of underpaid research assistants and understanding spouses/ partners, and myriad small grants and lecture funds from several U.S. universities,1 permitted us to meet, and in some cases, exceed our organizational goals over the first years of operations. The improvisational skills honed through years of operating in the interstices between service provision, artistic expression, and scholarly research allowed agency personnel to work sporadically and opportunistically even through the depths of the Trump administration. The historic appointment of Deb Haaland (Laguna Pueblo) has placed a member of a uranium-affected Indigenous community at the helm of the Department of Interior. While it remains to be seen how much the inertia of statecraft might resist Haaland's agenda, the time is right for the non-Native provisional co-directors of the National TLC Service to step aside and offer the research and conceptual framework we have developed as offerings toward intellectual and material decolonization. This will therefore be our final report as interim co-directors, as we look toward handing the reins to an unknown successor.

**Above:** Logo of the National Toxic Land/Labor Conservation Service.

# 7. THE NATIONAL TOXIC LAND/ LABOR CONSERVATION SERVICE

10-Year Final Report on Public Agency Organizing and Operational Responses to Cold War Legacies and the Nuclear Stockpile

SARAH KANOUSE & SHILOH KRUPAR, INTERIM CO-DIRECTORS

## BACKGROUND

The National TLC Service is a satiric but also sincere federal agency dedicated to the vigilant detection and exposition of military ecologies. Since the service was established in 2011, we have been hard at work collaboratively developing justice-oriented forms of public memory surrounding the staggering domestic impacts of the Cold War and U.S. atomic arsenal.

Few Americans realize the degree to which Cold War defense priorities live on through nuclear deployments, ongoing stockpile stewardship, and the containment and monitoring of toxic military residues.

- → The United States nuclear arsenal currently stands at around 3,700 – more than it possessed in 1955, with much greater lethality;<sup>2</sup>
- → The global active nuclear arsenal still stands at 9,500, with another 3,650 awaiting dismantling;<sup>3</sup>
- → The Obama administration began, and Trump intensified, a new era of investments in nuclear weapons and delivery systems, estimated in 2017 to total \$1.2 trillion over 30 years;<sup>4</sup>
- → Since taking office President Biden has continued to support these programs, requesting \$43 billion for nuclear weapons in his latest annual budget;<sup>5</sup>
- → Nuclear weapons bases and facilities cover more than 15,000 square miles of land in the U.S.;<sup>6</sup>
- → The global stockpile of fissile materials includes over 500 tons of plutonium-239, which is hazardous to humans for ~240,000 years.

Though it flies in the face of modernism's celebration of artistic autonomy, the practice of placing artists in organizational contexts is at least .75 years old and has expanded, in ambition if not in size, since the 1970s. Under the New Deal, the U.S. government's work relief programs hired artists to document economic conditions, decorate new public buildings, and produce performances to celebrate working people - an emergency measure that seeded the community arts movement a generation later. Other often-cited precedents include the Artist Placement Group, episodic efforts to place avant-garde artists in public school contexts, and the forty-year tenure of artist Mierle Laderman Ukeles as the official, unsalaried artist-in-residence at the New York Department of Sanitation. While the history of scholars working in such "embedded" contexts is less established, William Bunge's/Gwendolyn Warren's Detroit Geographical Expedition and Institute is a widely admired model. Today's uptick in municipal government artist-in-residence programs closely tracks the institutionalization of socially engaged art as a distinct field rendered newly relevant by the predations of neoliberal academia and urban governance. Analogs for scholars can be seen in new graduate programs in "public humanities" and Mellon-funded initiatives that encourage humanists to explore the policy implications of their research. $^{7}$ 

#### SARAH KANOUSE AND SHILOH KRUPAR

Alongside efforts to embed artists within pre-existing agencies, artists themselves have been organizing collectives along pseudo-institutional lines. Called "mockstitutions" by artist and critic Gregory Sholette and "parafictions" by art historian Carrie Lambert-Beatty, these self-authorizing agencies, corporations, bureaus, laboratories, and coalitions exist as both parodies of organizational culture under neoliberalism and as grassroots correctives that "intersect with the world as it is being lived." These two modalities - the embedded artist and the mockstitution - express what critic Grant Kester describes as modern art's internal conflict between "the desire for solidarity and reconciliation and the imperative of resistance and critique."9 As these emerging practices mature and as practitioners and sponsors move between modalities - the possibilities and limitations of each approach may come to exist as part of a broader ecology of strategies by which the traditional boundaries around art as an aesthetic and critical activity are redrawn.

The yet-to-be-fulfilled potential for artists and humanities scholars to put their unique skills and talents toward the service of government accountability inspired the wishful establishment of the National TLC Service, with Sarah Kanouse and Shiloh Krupar self-appointed as provisional co-directors. Our mission includes taking stock of the ways nuclear militarism has shaped our domestic landscapes, historical narratives, national priorities, and global politics. The agency is also responsible for organizing participatory cultural programming that addresses the historical geographies of U.S. warmaking and nuclear colonialism.

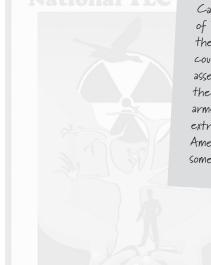
After an audit of actually existing bureaucracies, the U.S. Department of the Interior (DOI) was determined to be the most appropriate administrative home of the National TLC Service. With the most heterogeneous mission of any Cabinet office, the DOI is forced to cope with contradiction on a day-to-day, operational basis and embodies the deepest paradoxes of the American experience.

Moreover, the DOI has long served as an institutional dumping ground, and it continues to serve in this capacity for the lands most directly affected by the U.S. Department of Defense (DOD) and U.S. Department of Energy (DOE). After undergoing expedited clean-up, former military facilities are often transferred to the DOI'S Fish and Wildlife Service to be administered as part of the national wildlife refuge system. The "military to wildlife" or "bombs to birds" conversion process has become a preferred way to dispose of obsolete facilities deemed too toxic to return to any other use. The cabinet office long derided as the "Department of Everything Else," therefore, emerged as a most fitting home for the people and ecologies remaindered by the U.S. nuclear program.

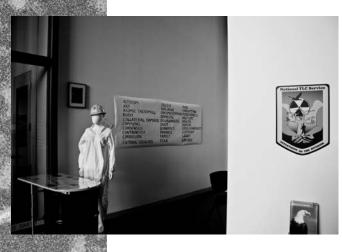
The resolution establishing the National TLC Service outlines these historical and continuing practices, explicitly positioning the agency as a response to previous governmental failures and evasions of responsibility. The resolution's text contests the widespread but inaccurate perception that the Cold War is safely past and that its toxic legacies have been resolved. Indeed, we live in a world in which toxicity and exposure are not the exception but the rule: In what has become our motto, "the Cold War isn't over; it's not even past." The National TLC Service was designed to confront the U.S.'s ongoing toxic open door by challenging dominant ways of knowing and ignoring the remains of the Cold War. Our very existence signals the charge to perform government differently,

to diverge from the bureaucratic production of secrecy and unaccountability that has marked U.S. atomic policy for over seventy years. In support of this goal, we approached the first years of operations in three distinct phases: Establishing Operations, Surveying the Terrain, and Developing Public Programs.

Our motto riffs on a now familiar idiom, originally penned by William Faulkner, about the past not really being past." At the most literal level, it signals the complex ways that the Cold War lives on through environmental contamination and health effects, military-industrial economies, the continued existence of nuclear weapons, and the unsolvable problem of nuclear waste, to name only a few examples. Conceptually, it draws upon the creative historical-materialist methodology of Walter Benjamin, who juxtaposed fragments from the past with the present in order to debunk the idea that history proceeds in a natural step-by-step or progressive linear way. We also find that the motto speaks to the ongoing renewal of the nuclear arms race, with over \$72 billion in global funding in 2020 alone. 12 Defense policy analysts deem nuclear weapons stockpiling to be back on the agenda - this time for the purposes of blocking rising nuclear state powers and non-state nuclear actors. Cavalier pro-proliferation wonks in the Department of Defense lack on-the-ground knowledge about the conditions of facilities and communities across the country that have been part of the U.S. national nuclear assembly line for more than 75 years. Either that, or they cynically hope that the risks of the new nuclear arms race can be more fully offshored in the global extractive economy beyond the settler colonies of North America, with Namibia and Kazakhstan now operating some of the largest mines in the world. 13



SARAH KANOUSE AND SHILOH KRUPAR



The National TLC Service opened a temporary field office to the public in the IDEA Space at Colorado from March to May 2016.

# **PHASE 1: Establishing Operations**

In order to *behave* governmentally, the National TLC Service must first *appear* governmental. Creating a visual identity and communications strategy was an essential first step in signaling our critique and constituting our public. Our appearance must reference the visual culture of governmentality while suffusing it with contradictory, challenging, and uncanny imagery. We quickly released a logo, launched the official National TLC Service website, developed informational brochures about the agency, and produced a short video to communicate our mission.<sup>14</sup>

Our visual identity was carefully developed to signal our mission of listening to and caring for the uncanny byproducts and "collateral damage" - human and non-human - of the atomic arsenal. Our logo represents our commitment to conservation by echoing the chevron-shaped badges of the U.S. Fish and Wildlife Service, National Park Service, and National Forest Service. On the other hand, what is being conserved here is distinct/unusual. Two cupped hands carefully hold a gnarled, toxic green tree and the silhouette of a stiffly posed, hard-hatted worker. The hands belong to a figure whose shoulders merge into the shape of mountains. Above these hills, a lone goose flies across the hazardous waste-symbol sun. The agency's website echoes the brown-and-green palette long favored for environmentally themed organizations but replaces soothing earth tones with contrasting bright yellow and neon blue. These choices of color and iconography acknowledge that "nature" and "waste" are not mutually exclusive or eternal categories, with military and industrial actors both utilizing and producing new forms of nature - from transuranic elements to disposal cell dog parks – in ways that cannot be entirely predicted or controlled.

In a similar vein, our field uniform replaces the reassuring, retro brown workwear of the park ranger with the hazmat coverall - an outfit whose brilliantly white appearance signals the frightening invisibility of the contamination it protects against. Where the ranger reassures, the TLC agent disturbs. The hazmat suit announces, "This is no ordinary dirt," and our appearance in uniform far from known hazardous sites suggests that zones of exposure extend well beyond the confines of the nuclear weapons complex. The replacement of the soaring American bald eagle with a taxidermied specimen - beak agape, tongue visible, and frozen mid-squawk - lends an uncanny quality of suspended animation to the cover of our brochure. Our official agency video references classic moments of Cold War culture, restaging or compositing them with present-day footage to demonstrate that their residues live on in many

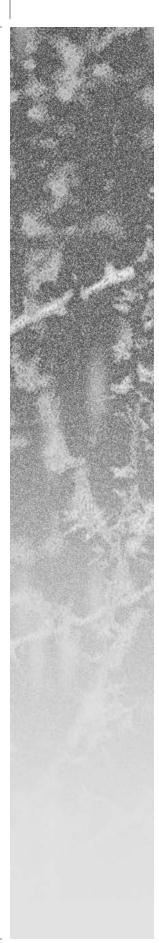


National TLC Service Agent Shiloh Krupar conducts a site visit to the grounds surrounding the shuttered Boiling Nuclear Superheater (BONUS) Reactor Facility, now a popular surfing spot, in Rincón, Puerto Rico.

forms. These visual strategies call into question both the public face of government and the authority and plausibility of the TLC Service itself. If the rhetoric of governmentality typically performs a reductive function that assumes legitimacy, suppresses controversy, and flattens complexity, the National TLC Service marshals the language and visual culture of bureaucracy to critique and place it in question. Our goal is not to deceive but to productively confound, inviting our public to imagine alternatives to the insufficiency, limited efficacy, and impoverished public engagement of the actually existing governmental response to the damaging effects of military and nuclear toxics.

As someone whose political identity has long slid leftward on the anarchist spectrum, I initially conceived the National TLC Service as a purely satiric, critical project. The government's handling. of the legacies of its nuclear program has been so slipshod, thoughtless, and downright callous that "exposing" it to the mutations of negative publicity is an obviously important first step. Yet lambasting the government for its paternalistic, technocratic blindspots is a popular spectator sport on both the left and the right. In the absence of a prefigurative position, parody may unintentionally strengthen the already hegemonic power of what Ruth Wilson Gilmore calls the "antistate state. 15 At first, I thought of the National TIC Service as an honest forgery: In the web of obfuscation that surrounds the "greening" of the U.S. military, only a fake agency can tell the truth. What we initially considered a one-off thought experiment became an idea people wanted to believe in, and we soon found ourselves invited to expand the project in real life.

The move from idea to performance allowed us to modulate the satiric affect and interject a note of sincerity to propose, through enactment, what a government rooted in mutual accountability, vulnerability, and transparency might look like. Our ability to pursue this mission is necessarily ad-hoc given our funding, personnel, and day jobs. Indeed, the problems stemming from nuclear militarism overwhelm the capacity of the actually existing. Department of the Interior. Clearly, nuclear crimes cannot be addressed by either the private markets of neoliberal capitalism or the voluntary associations of pirate utopias. The TLC Service seeks to use our amateur status to test other avenues for action on a local level that could be cultivated by the state on the geographical and temporal scale on which it only can act. Of course, on the time scale of the atomic, all governments are ad-hoc. (Sarah)



# **PHASE 2: Surveying the Terrain**

To better understand the current state of nuclear commemoration, the National TLC Service completed an audit of the rhetorics of atomic memory. We conducted site visits to key locations for documentary purposes as well as carefully examined promotional materials, media coverage, and audience commentary posted to various Internet sites. Our field trips included a wide range of sites from famous Manhattan Project locations to obscure waste disposal cells, to understand the extent and diversity of atomic sites. We also surveyed contemporary popular media, including video games and television shows. While these sites and products vary greatly in terms of audience size, demographics, and profile, they demonstrate that the Cold War era has experienced a resurgence of popular interest thirty years after its ostensible end. Our investigations found that the former nuclear complex increasingly functions as an exhibitionary complex, as the domestic spaces and ruins of war are repurposed for atomic commemoration. Simultaneously, existing atomic museums and televisual nuclear nostalgia bolster public awareness of the Cold War both as a consumable bygone era and as infotainment.

The most ambitious and high-profile of these commemorative efforts is the Manhattan Project National Historical Park, established as a provision within the National Defense Authorization Act of 2015. The park resulted from over a decade of conversations between the National Park Service (NPS) and the DOE, with sustained advocacy from a number of non-governmental organizations. The non-contiguous park is essentially an NPS-authored interpretive overlay on three major sites – some still active, all remaining under DOE management – where work on the world's first atomic bomb took place: Los Alamos, New Mexico; Oak Ridge, Tennessee; and Hanford, Washington.<sup>16</sup> While the interpretive details are still evolving, a commission of scholars met in late 2015 to lay out potential themes, such as the political and ethical issues surrounding the decision to use the bomb; tensions between open scientific inquiry and national security; historical personalities and daily life in the secret cities; and the pivotal position of the nuclear weapons effort within the history of science and technology.<sup>17</sup> Event reflections also identified present-day environmental legacies and relationships with smaller atomic and Cold War museums to be priorities that had not yet received adequate attention.



Alongside the long development period of the Manhattan Project National Historical Park, a number of atomic museums and tours have been established, expanded, or proposed. After many years in Old Town Albuquerque's museum district, for example, the National Museum of Nuclear Science and History moved to a significantly larger new facility, with outdoor exhibition space, in southeast Albuquerque in 2009. The Atomic Testing Museum in Las Vegas achieved national status in 2012, becoming part of a small group of privately operated museums affiliated with the Smithsonian network. The museum's signature exhibition is the sensationalistic "Ground Zero Theater," a bunker-inspired screening room that purports to simulate an atmospheric bomb test, complete with shaking seats and blasts of hot air.18 On the more academic side, the Wende Museum moved to the armory building in the Los Angeles community of Culver City in 2017 to better present and interpret Cold War history and culture from the Soviet bloc.19 Finally, numerous site-specific interpretive centers tell local stories of involvement in the nuclear weapons complex. Often funded as part of remediation agreements between municipalities, the federal government, and corporate contractors, these interpretive centers generally emphasize heroic worker stories and highlight the success of environmental clean-up operations, as is the case at Weldon Spring, Missouri, and the Fernald Reserve in Ohio. When continuing funding is not provided, these site-specific museums often struggle to achieve sustainability, as in the case of the former Rocky Flats plutonium production facility in suburban Denver, Colorado.

### Above:

The interpretive center at the Department of Energy's Weldon Spring uranium feed materials site devotes equal time to the plant's history and the engineering details of the on-site disposal cell.

#### SARAH KANOUSE AND SHILOH KRUPAR



Atomic pop culture memorabilia on display at the National Museum of Nuclear Science and History in Albuquerque, New Mexico.

Displays of atomic pop culture are common features in many of the divergent sites that make up the ad-hoc nuclear public memory industry. While presumably designed to humanize the Cold War period and provide a sense of everyday life in the shadow of the bomb, they tend to dress the era in retro-glam and obscure the profound anxiety within which these cultural objects circulated. Furthermore, the Cold War is indistinguishable from the first period of mass televisual spectacle, and itself has become subject to commemoration via the popular moving image. With stunning cinematography and a score by members of Sigur Rós, the short-lived cable series *Manhattan* presented a highly fictionalized account of the motivations, political machinations, and complicated lives of the scientists sequestered in Los Alamos to build the first atomic bomb. Other, more fanciful references to nuclear weapons crop up in the post-apocalyptic video game series Fallout and The Americans, a popular spy television serial focusing on the personal lives of KGB agents in deep cover as a 1980s suburban couple.<sup>20</sup> The Cold War memorial complex itself has become part of this fiction/nonfiction cross-referencing system: Albuquerque's National Museum of Nuclear Science and History had its television moment in season two of Breaking Bad, when it served as the secret meeting point between a street dealer network and the fledgling meth kingpin who dubbed himself "Heisenberg" after the architect of the failed Nazi atomic bomb program.<sup>21</sup>

Our brief survey of Cold War memory has revealed certain common threads. These include the progressivist conceptions of science; tantalizing glimpses into forbidden worlds of science, espionage, or crime; aesthetic and pop cultural nostalgia; the nuclear sublime and its dystopic mirror image; and tales of resilience, remediation, and recovery. These rhetorical themes are neither exhaustive nor exclusive; they overlap, sometimes draw on each other, and can be analyzed as operating within a more general Cold War commemorative refer-

When did you first become radical? I remember graduate school conversations about "political awakening." I did not really feel authorized to speak. The inquiry usually implied a division between I was born into government administration: My father worked for the DOE and my mother taught fellowships related to earlier wartime investments, and I received was supported by federal with deep ties to the nuclear complex. I now teach in a School of Foreign Service with a in such institutions has meant that ideological purity and avant-garde distance are neither

Bureaucracy and what Michel Foucault calls the "administrative grotesque" have been my "proving ground," directing my attention to the politics of form — a way of seeing radical analysis in the service of politics is defining one's object, targeting it, and opposing it. Instead, the investments in governance and subjectivity. This involves a restless exploration of knowledge as a nowhere outside the pedagogical and the political.

The National TLC Service was imagined, in part, as a collaborative experiment to carry out art and research as a social practice of knowledge production. In doing this project, both of us troubling distinctions within our respective fields of geography and visual arts in academia, by pedagogically agitates around democratizing bureaucratic/technocratic expertise in a political era on "stakeholders," relies on the "non-profit industrial complex," and depends not a technical, problem, and considers creative pedagogies to be necessary for demilitarizing industrial complex through process-oriented methodologies that cut across scholarship and public fields. (Shiloh)

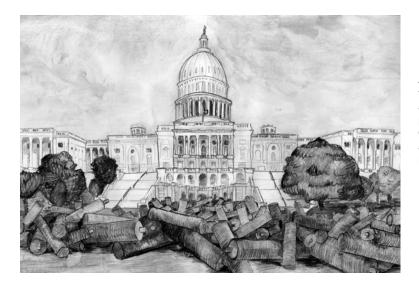
encing system. While further analysis of these commemorative modes is required, our preliminary investigation revealed that many attempt to foreclose active interpretation to minimize and contain controversy. When ethical quandaries may be explored, the race to achieve the atomic bomb is nonetheless presented as *the* pinnacle of human scientific achievement, thickened with a dash of unrecognized heroism. In others, nostalgic period reconstructions, easily digestible spectacle, and personality-driven storylines dominate the scene. Even in sites of unquestionable environmental devastation, narratives of scientific progress – now in pursuit of ecological restoration and waste containment – attempt to reassure potentially anxious visitors. The National TLC Service is concerned that dominant Cold War memorial practices distance the era and its atomic and chemical weapons from present and future embodied environmental geographies of war.

# **PHASE 3: Developing Programs**

In a reparative spirit, the National TLC Service considers popular interest in the Cold War to be an opportunity to address the ongoing political, ecological, cultural, and ethical implications of U.S. military projects. In contrast to the spectacular forms of atomic memory and kitsch in our inventory, the vast physical and economic infrastructure of the American military state remains invisible. Between the scales of local lore and national databases, the specificity and reach of the nuclear complex continues to be largely unexplored. The Cold War remains hidden in plain sight due to legacies of secrecy, the domesticating effects of consumer technologies, the invisibility of radiological contamination, and the comparative banality of its landscape. While critical accounts of the Cold War do exist - virtual museums, community-based toxic tours, experimental monuments – they are largely self-funded, temporary and/or conceptual, and usually isolated from the better-known museums, national laboratory visitor centers, and historic sites. Therefore, in our third phase of operations, the National TLC Service initiated a series of public programs for a proposed National Cold War Monuments and Environmental Heritage Trail (NCWMEHT) that would investigate local legacies from the Cold War and provide a platform for communities, artists, and critics to coordinate with each other at a larger scale.



National TLC Service Agents Shiloh Krupar and Sarah Kanouse pose with participants in the National Cold War Monuments and Environmental Heritage Trail design charrette at the National TLC Service temporary field office in Colorado Springs, Colorado.



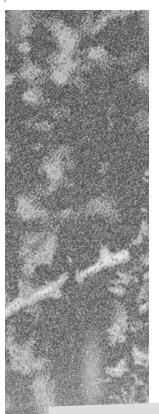
Artist's sketch of the spill monument at the center of the proposed National Cold War Monuments and Environmental Heritage Trail.

# NATIONAL COLD WAR MONUMENTS AND ENVIRONMENTAL HERITAGE TRAIL

The National Cold War Monuments and Environmental Heritage Trail (NCWMEHT) is a proposed coast-to-coast route linking both famous and obscure sites involved in the production, testing, and storage of nuclear and chemical weapons since World War II. The goal is to encompass but also extend beyond existing commemorative efforts, in order to create a narrative that is both more comprehensive and responsive to the particularities of local experience. Recognizing that there is no coherent national narrative of the nuclear weapons complex, the National TLC Service has established a process to work with various publics to map a "people's geography" of the Cold War's ongoing, differential impacts. Our trail will incorporate both well-known and unmarked sites, as well as mundane places that rarely register in popular atomic geographies, from training facilities to disposal cells. Given the nuclear weapons complex's vast extent – temporal, geographic, and economic – and the atmosphere of secrecy and/or obfuscation that surrounds it, the National TLC Service recommends that identifying and enrolling sites for the Trail continue through the United States tricentennial in 2076.

At the symbolic center of the NCWMEHT is a monument consisting of a pile of 17,287 bronze forms – cast from smaller nuclear waste storage casks – on the lawn of the U.S. Capitol. The number of cask forms is based on the estimated size of the U.S. nuclear arsenal at the fall of the Soviet Union in 1991. After a year of public display, cask forms will be removed from the pile and installed as site markers along the National Cold War Monuments and Environmental Heritage Trail until the number of casks in the pile equals the number of weapons in the U.S. arsenal (currently ~3,700).<sup>25</sup> The central monument is at all times indexed to the size of the current U.S. nuclear arsenal: When the government, as planned, begins producing new, smaller, tactical weapons, new casks will be added to the monument.<sup>26</sup>





Recognizing the (often intentional) incompleteness of government records, sites for inclusion in the NCWMEHT are selected not only through historical research but also the collective knowledge of affected communities. Many citizens' groups, tribal communities, and grassroots organizations have been conducting their own research, environmental monitoring, and commemorative activities for decades. The National Cold War Monument and Environmental Heritage Trail is an opportunity to gather together and amplify these efforts. Additionally, individuals somewhat more distant from these legacies have been galvanized by National TLC Service programming and asked to participate in the process of developing the Trail. To that end, we have developed two mechanisms of public participation: Site nominations and design charrettes. A third program, the TLC Service Transnatural Park Posters and Stamp Series, fosters public awareness of the NCWMEHT and highlights especially forgotten sites on a state-by-state basis.

The National Cold War Monument echoes post-minimalist and land artworks through its irregular "pile" or "spill" form and the use of fluctuation and potential disappearance of the work as a gesture equal parts poetic and conceptual. Most directly, the piece references Joseph Beuys's participatory social sculpture project "7,000 Eichen/7,000 Oaks," consisting of an initial pile of 7,000 basalt columns removed one at a time to accompany oak trees planted by the artist and community members around the city of Kassel, Germany. In a more personal vein, Félix González-Torres's 1991 Untitled (Portrait of Ross in LA) turns the disappearing pile into elegy: A pile of candy is figured as the artist's dead lover, his body carried off piece by piece by the viewers and replenished daily by the museum.

The indeterminacy and disintegration of these works align them with what James Young. identified in the early 1990s as "countermonuments," charting "metamorphosis of the monument from the heroic, self-aggrandizing figurative icons of the late 19th century ... to the antiheroic, often ironic and self-effacing conceptual installations that mark the national ambivalence and uncertainty of late 20th-century postmodernism." Noting that audience activation is more central to the operations of these artworks than a critique of the monument tradition, Mechtild Widrich has recently described as "performative monuments" those that hinge on "the temporal interaction with an audience that itself is no eternal public, but a succession of interacting subjects." Page 128.

Through this lens, the TLC design charrettes themselves emerge as monuments, the architectural design process eclipsing its product in its capacity to catalyze collaborative citizenship projects that model intergenerational ecological responsibility and find ways of living with contamination and loss. In both their form and substance, the charrettes re-align modernist polarities between monument and countermonument, nature and waste, wildlife and human, community and contamination. Furthermore, the National Cold War Monuments and Environmental theritage Trail confounds the problematic tendency to privilege Washington, D.C. as the locus of American power and public memory. Our unbuildable proposal for a bronze spill of fake nuclear waste casks on the Capitol grounds is delightful symbolism, but the real work on the monuments and the charrettes is done by small groups of people, in overlooked or marginal places, on an ongoing basis, and over a long period of time.



In a video submission, National TLC Service Field Agent Josh McDonald nominated the airspace above the Western United States for inclusion in the National Cold War Monuments and Environmental Heritage Trail.

# PUBLIC MARKER SYSTEM AND SITE NOMINATIONS

The National TLC Service website features an open-ended public call for submissions of sites for inclusion in the Trail. Nominators produce a brief video (using a webcam or a cell phone) to describe the site and explain why it should be included in the Trail. Participants are then inducted as TLC Service Field Agents, receiving a miniature replica of the trail marker and an agency patch in exchange for committing to interpret the site actively for others. A number of the inventive and intelligent amateur-produced nominating videos are archived on our website and have been featured in temporary field offices and other exhibition contexts.

Nominations have ranged from familiar locations, like Hanford and the Nevada Test Site, to the creation of non-territorial sites, like the airspace over the entire western United States. Whether nominators ratify an acknowledged site of historical significance or propose an unexpected new stop along the Trail, they become active in a commemorative process that is based less on official markers and tour guides than on a living, communal process of storytelling and continual re-interpretation. Videos often include anecdotes describing personal or family connections to the places described. Through a continual nomination process, the TLC Service hopes to make the Cold War an ongoing and active site of public living memory through mapping and storytelling rituals.

# **PUBLIC CHARRETTES / WORKSHOPS**

The National TLC Service also draws on community design methods in developing the Trail. In 2013, we launched a series of regional *charrettes*, or intensive design workshops, to plan the route of the Trail and to propose a series of monuments to reflect the local character of the nuclear weapons complex. Two regional events have been held so far: Illinois in 2013 and Colorado in 2016. Catalogs of outcomes from both charrettes are available on our website.

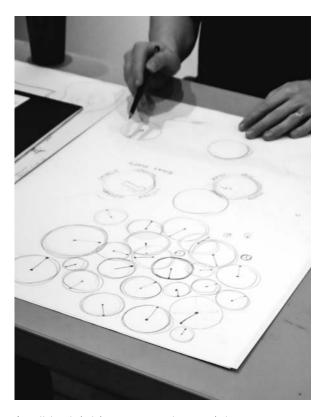
The design charrette is a well-established methodology in architecture and urban planning that brings together bureaucratically defined "stakeholders" to collectively gather information, identify needs, and brainstorm design solutions. Its community orientation is seen as a corrective to architectural and public art projects that ignore neighbors' needs and desires. However, the process often unfolds less-than democratically, devolving into a mechanism for consultation with bureaucratically legible "community" representatives. Too often, project control remains in the hands of experts, and the consultation process homogenizes different positions and experiences as one input.

National TLC Service Agent Krupar crowns participant Conny Bogaard "Treehugger" in an icebreaker exercise at the Colorado design charrette for the National Cold War Monuments and Environmental Heritage Trail in March 2016.

Mapping conventions reflect legacies of imperial exploration, resource extraction, colonization, and state control. These strategic activities have required the collection of more precise data and objective scientific procedures, resulting in what seem to be value-neutral mirrorings of space rather than interest-laden renderings of the surface of the planet. But while maps reinforce dynamics of coercion and manipulation, maps can be - and are - used as tools to support social movements and social justice projects.29 The National TLC Service is interested in the role of maps and contemporary mapping in political struggles - specifically, how maps are political and how mapping can be a political act. Mapping techniques and technologies can serve as applied methodologies to resist and/or supplement dominant knowledge. Counter-mapping projects, such as Indigenous mapping networks and radical atlases and cartographic practices, challenge official maps while also using map conventions to lay claim to resources and land or to render alternative worlds 50 Mapping appears in TLC work in a number of ways: As a form of protest and geopolitical critique; as social commentary, including alternative history trails, collective walks, and site nomination systems that feature marginalized experiences and critique the status quo; and as a method of community organizing, wherein mapping functions as a form of human communication and process-based participatory learning 31 We consider map literacy to be an educational tool for envisioning and advocating social change.

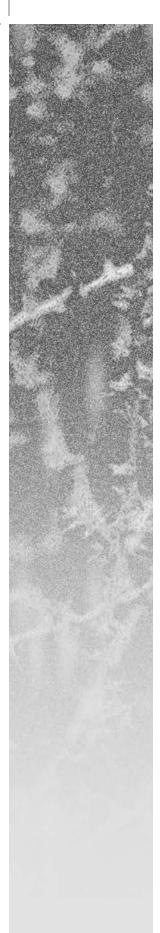
By contrast, National TLC Service charrettes invite participants from generationally, politically, and geographically fragmented communities affected by the Cold War, in order to recognize and develop the capacity of non-designers to intervene critically in landscape and the built environment. We emphasize that everyone present offers different kinds of expertise and encourage the self-organization of small groups with complementary skills in order to develop solutions that no one could devise on their own. In the Illinois charrette, for example, an activist fighting Manhattan Project radiological contamination in her neighborhood worked with an ethicist and a visual artist to propose a functional monument consisting of a mobile health facility and oral history center connecting personal stories of potential exposure to citizen-science data collection efforts.

The charrettes use post-consensus processes that maintain polyphony and the potential for internal dissent. The events become opportunities to



A participant sketches a monument proposal at the Illinois design charrette for the National Cold War Monuments and Environmental Heritage Trail in November 2013.

publicly work through — though not necessarily overcome — ongoing antagonisms surrounding the nuclear weapons complex. The charrettes begin with a roleplaying exercise designed to help participants recognize and openly discuss their internalized assumptions around various positions commonly associated with the Cold War. These include stereotypes like "The Treehugger" and the "The Patriot," as well as professional roles such as "The Regulator." While this activity fosters critical distance from one's prior assumptions and encourages an appreciation of the contributions made possible by others' perspectives, differences between participants can flare in uncomfortable ways. Rather than glossing over these moments of discomfort, charrette facilitators strive to provide respectful space for the mutual recognition and constructive elaboration of that difference. During a tense moment in the Colorado charrette, an environmental activist who had lost family members to diseases associated with uranium mining expressed disgust at a pro-mining community's celebratory eating of a yellow layer cake, symbolizing raw uranium, at their annual picnic. The entire group listened as the organizer of the picnic expressed re-



gret at the pain the gesture inadvertently caused and explained that it was intended as a light-hearted recognition of the unity and resilience of a now-dispersed community. Simply noting the courage required to raise and respond to conflict establishes that no single perspective has primacy in the commemorative process and models a way to make deep divisions more visible (through intimate proximity to each other) and more open to meaningful reflection.

At the charrettes, National TLC Service facilitators emphasize the wishful nature of the NCWMEHT. The knowledge that the monuments proposed during the workshop will probably never be realized seems to license a wide range of creative responses, from the poetic to the educational to the satiric. The iterative nature of the workshops allows the TLC Service to highlight multiple speculative monuments and accommodate many specific, conflicted, and inter-related positions. The objective of the NCWMEHT is not to rewrite existing historical narratives and rhetorics of nuclear militarism, but to supplement, contextualize, and contest. Liberated from the burdens of pragmatism and the imperative to produce a comprehensive narrative, the charrettes are a provocation for social and political engagement with Cold War landscapes through architectural play. They align documentation with speculation in a common project that articulates diverse positions, landscapes, and conditions of exposure to allow an uneven atomic commons to materialize. Ultimately, the NCWMEHT is an emergent geography, one whose process of creation is as much a part of its "path" as any route traced on a map.

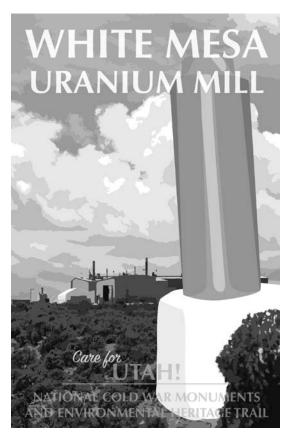
# TLC SERVICE TRANSNATURAL POSTER AND STAMP SERIES

Concurrently with the development of the NCWMEHT, the National TLC Service proposes releasing a series of commemorative posters and postage stamps to highlight significant toxic sites in each state and across North America. These posters and stamps echo the well-known, early twentieth-century series of National Park Service posters that rendered the conservation of beautiful public lands as an inextricable part of the U.S.'s national identity. Utilizing these graphic conventions, the National TLC Service posters and stamps play with the aesthetics of nature and waste to galvanize awareness of environmental hazards and the domestic footprint of war but also, simultaneously, to inspire public appreciation of the nation's contaminated but no-less stunning public lands.

The poster series extends the recognition, also found in our logo, that waste and nature coexist and inflect one another. Our charrettes allow publics to develop a broader suite of possibilities for addressing the painful realities of contamination and loss than those afforded by understandings of nature as either pure *or* unnatural and "ecocidal." The poster and stamp series fosters what our institutional acronym popularly stands for – "TLC" – that is, *care of* and *accountability for* the monstrous and uncanny by-products, collateral damage, and multiple bodies affected by the nuclear weapons complex – bodies of land or water, animal bodies, human bodies, administrative bodies, national bodies.

Responses to toxic crisis typically evoke some combination of natural, bodily, or national sovereignty that impede creative demilitarizing efforts. The National TLC Service seeks to cultivate queer understandings of nature instead of resorting to conservative preservation efforts that rely on notions of national exceptionalism, untainted nature, or the pure body. The agency enlists the term "transnatural" to signal both the indeterminacy of and ongoing attachments to nature or the natural. Instead of claiming the privilege of distance from waste or portraying nature as passive victim in a nostalgic realm of lost purity, the agency tactically considers nature to be ongoing social-ecological composition, qualified by the unevenly embodied realities of toxicity and contamination. Our mission applies a queer ecofeminist perspective to environmental education and ethics, in order to reevaluate, even dramatize, different kinds of bodies as sites of material connection and parodic inhabitance capable of converting the fearful into the livable 32 Our brand of administration is indebted to the rich inventory of social practices by LGBTQIA2S+ communities that survive - flourish — within often unsupportive structures 33 Catriona Sandilands captures the spirit of our approach, "to queer nature is to 'put out of order' our understandings, so our 'eccentricities' can be produced more forcefully."34 The agency advocates a more diversified ecological politics that combines concerns about equity of environmental justice efforts with investigations of deviant material agencies and the impurities and inter-corporeal effects of militarism. We see this as a corrective or counter-practice to the militarized resilient life only claimed by those with the means to preserve themselves amidst widespread conditions of insecurity and risk. Our queer environmental programming rethinks relations with waste to challenge the status quo and cultivate irreverence toward the traditional boundary making of classic environmentalism and the bodily security of liberal (white heteronormative) environmental security.





National TLC Service Transnatural Poster for Utah featuring the controversial White Mesa Uranium Mill.

# **TLC VALUES: Our Atomic Commons**

In closing, we – the National TLC Service – believe the National Cold War Monuments and Environmental Heritage Trail is urgently needed:

- → To counter the history of misinformation and ignorance regarding the material effects of the Cold War
- → To keep uncertainty open with respect to the material transformations initiated by militarization
- → To make accountability an ongoing public and government relation

While American mythologies hold that war has not profoundly shaped our "homeland," the existence of sovereign Indigenous nations within the territorial boundaries of the U.S. and nearly 800 U.S. military bases in over 70 countries demonstrate the primacy of force in our history and cast into uncertainty exactly where the nation begins and

ends. Material geographies of the Cold War are always already transnational. The National TLC Service, therefore, will not remain tethered to U.S. territory; rather, the Trail and TLC agency "pop-ups" will expansively address sites – and companies, markets, bodies, and other material flows – involved in nuclear testing, waste, and fallout. Furthermore, the inclusive public process is a provocation to explore how we should respond to our contemporary Cold War condition – the subtle forms of exposure, abandonment, and "slow violence" that operate below the threshold of catastrophe to devastate bodies and hollow out landscapes. The doing so, the National TLC Service endeavors to coordinate an "apology" that takes the form of a *transnatural* and *transnational* ecological politics.

Both the uneventfulness of the Cold War and the profoundly alarming reality of its residues make it difficult – seemingly impossible – to commemorate. Moreover, the fact that the U.S. and Soviet governments subjected the world's population to a vast, uncontrolled radiological experiment threatens to delegitimize any national or international attempts to address its effects. The National TLC Service sees this not as reason for despair and inaction but instead as an occasion for experimentation with a variety of techniques and aesthetics that challenge the status quo, care for the residual, and encourage more exuberant politics. In an era in which the "left hand" of the state is in retreat across the industrialized world, the National TLC Service is a platform on which to rehearse alternative social organization, embodied ecological politics, and open-ended governmental administration.

It has been an exciting decade of operations. We have laid a foundation for how government might operate differently: By embracing controversy and complexity, by facilitating open-ended dialogues, and by responding to the physical, environmental, and cultural impacts of the American nuclear state. In everything we do, we are motivated by our desire to serve the downwind and downstream populations of the Cold War, which is to say, all of us. We conclude this report by formally stepping down as interim co-directors of the National TLC service, with an open call to *decolonize public agencies*.

### **NOTES**

- 1 University of Iowa, University of Illinois, and University of Maryland; Cooper Union, Georgetown University, Northeastern University, and Colorado College.
- 2 Historic stockpile figures are from Norris and Kristensen, "Global Nuclear Weapons Inventories." Current figures include both deployed and stockpiled warheads. Refer to Kristensen, Korda, and Norris, "Status of World Nuclear Forces"; and Arms Control Association, "Nuclear Weapons."
- 3 Kristensen, Korda, and Norris, "Status of World Nuclear Forces."
- 4 Mehta, "America's Nuclear Weapons."
- 5 Democracy Now, "U.S. Led 2020 Nuclear Weapons Spending."

- 6 Schwartz, *Atomic Audit*; US Nuclear Weapons Cost Study Project, "50 Facts about U.S. Nuclear Weapons."
- 7 See, for instance, the Humanities Without Walls consortium and its Mellon-funded "Global Midwest" research initiative, based at Agent Kanouse's alma mater.
- 8 Lambert-Beatty, "Make-Believe," 54. See also Sholette, Dark Matter, 153.
- 9 Kester, "FIELD Editorial 4."
- 10 Full text of the resolution is available at the National TLC Service website.
- 11 See, for example, Pred, The Past Is Not Dead.
- 12 Democracy Now!, "U.S. Led 2020 Nuclear Weapons Spending."
- 13 For a discussion of "nuclearity" in Africa during the historic Cold War and the contemporary boom, see Hecht, "An Elemental Force."
- 14 National TLC Service.
- 15 Gilmore, "In the Shadow of the Shadow State."
- 16 National Park Service, "Memorandum of Agreement."
- 17 National Park Service, "Scholar's Forum Report."
- 18 See tourism-related reviews at "National Atomic Testing Museum."
- 19 Refer to the Wende Museum website: https://www.wendemuseum.org/about-us.
- 20 For fan-sourced information on the Fallout series, see "Welcome to Nukapedia."
- 21 Alcala, dir., "Negro y Azul," Breaking Bad.
- 22 The University of California-Berkeley, where Agent Krupar received her PhD in geography, is part of the UC system, which operated Los Alamos National Laboratory for sixty years and continues to oversee the Lawrence Berkeley and Lawrence Livermore laboratories. Los Alamos National Laboratory conducted classified work toward the design of nuclear weapons.
- 23 Foucault, Abnormal, 11-14.
- 24 CUNY Graduate Center, "The Detroit Geographical Expedition."
- 25 Kristensen, Korda, and Norris, "Status of World Nuclear Forces."
- Despite his ambition to rid the world of nuclear weapons, former President Barack Obama presided over the initiation of a nuclear weapons "revitalization" program estimated to cost \$1 trillion over thirty years. Donald Trump sought to further expand the U.S. atomic arsenal, raising the spectre of a multi-player arms race involving China and Russia.
- 27 Young, "Memory and Countermemory."
- 28 Widrich, Performative Monuments, 8.
- 29 Krupar, "Map Power and Map Methodologies."
- 30 See, for example, Lize Mogel and Alexis Bhagat, eds., An Atlas of Radical Cartography.
- 31 Kanouse, "Critical Day Trips." Also refer to Counter Cartographies Collective, Craig Dalton, and Liz Mason-Deese, "Counter (Mapping) Actions."
- 32 Krupar, Hot Spotter's Report, 215-51.
- 33 Sedgwick, Touching Feeling, 149-51.
- 34 Sandilands, "Lavender's Green?" 22.
- 35 Nixon, Slow Violence; Stoler, "Imperial Debris"; Berlant, "Slow Death."

#### **BIBLIOGRAPHY**

- The Americans. Created by Joseph Weisberg. FX Network, 2013-18.
- Alcala, Felix, dir. "Negro y Azul." *Breaking Bad*, season 2, episode 7. Written by Vince Gilligan and John Shiban. AMC Network, 19 April 2009.
- Arms Control Association. "Nuclear Weapons: Who Has What at a Glance." https://www.armscontrol.org/factsheets/Nuclearweaponswhohaswhat.
- Berlant, Lauren. "Slow Death (Sovereignty, Obesity, Lateral Agency)." *Critical Inquiry* 33, no. 4 (2007): 754–80.
- Counter Cartographies Collective, Craig Dalton, and Liz Mason-Deese. "Counter (Mapping) Actions: Mapping as Militant Research." *ACME: An International E-Journal for Critical Geographies* 11, no. 3 (2012): 439–66.
- CUNY Graduate Center. "The Detroit Geographical Expedition: What Is Its Relevance Now?" http://www.gc.cuny.edu/All-GC-Events/Calendar/Detail?id=27573.
- Democracy Now! "U.S. Led 2020 Nuclear Weapons Spending; Now Biden Going 'Full Steam Ahead' on Trump's Nuclear Plans." 10 June 2021. https://www.democracynow.org/2021/6/10/biden\_putin\_nuclear\_weapons.
- Foucault, Michel. *Abnormal: Lectures at the Collège de France 1974–1975*. Edited by Valerio Marchetti and Antonella Salomoni. Translated by Graham Burchell. New York: Picador, 1999.
- Gilmore, Ruth Wilson. "In the Shadow of the Shadow State." In *The Revolution Will Not Be Funded: Beyond the Nonprofit Industrial Complex*, edited by INCITE! Women of Color Against Violence, 41–52. Cambridge, MA: South End Press, 2009.
- Hecht, Gabrielle. "An Elemental Force: Uranium Production in Africa, and What It Means to Be Nuclear." *Bulletin of the Atomic Scientists*, 1 March 2012. https://doi.org/10.1177/0096340212440352.
- Humanities Without Walls. http://www.humanitieswithoutwalls.illinois.edu.
- Kanouse, Sarah. "Critical Day Trips: Tourism and Land-Based Practices." In *Critical Landscapes: Art, Space, Politics*, edited by Emily Eliza Scott and Kirsten Swenson, 91–130. Berkeley: University of California Press, 2015.
- Kester, Grant. "FIELD Editorial 4." FIELD: A Journal of Socially Engaged Art Criticism 4 (Spring 2016). http://field-journal.com/editorial/field-editorial-4.
- Kristensen, Hans M., Matt Korda, and Robert Norris. "Status of World Nuclear Forces." Federation of American Scientists, October 2021. https://fas.org/issues/nuclear-weapons/status-world-nuclear-forces.
- Krupar, Shiloh. *Hot Spotter's Report: Military Fables of Toxic Waste.* Minneapolis, MN: University of Minnesota, 2013.
- "Map Power and Map Methodologies for Social Justice." Georgetown Journal of International Affairs 16, no. 2 (2015): 91–101.
- Lambert-Beatty, Carrie. "Make-Believe: Plausibility and Parafiction." *October* 129 (Summer 2009): 51–84.
- Manhattan. Created by Sam Shaw. wgn Network, 2014–15.

- Mehta, Aaron. "America's Nuclear Weapons Will Cost \$1.2 Trillion over the Next 30 Years." *Defense News*, 31 October 2017. https://www.defensenews.com/breaking-news/2017/10/31/americas-nuclear-weapons-will-cost-12-trillion-over-the-next-30-years.
- Mogel, Lize, and Alexis Bhagat, eds. *An Atlas of Radical Cartography.* Los Angeles: Journal of Aesthetics and Protest Press, 2008.
- "National Atomic Testing Museum." *Vegas.com.* https://www.vegas.com/attractions/off-the-strip/atomic-testing-museum.
- National Park Service. "Memorandum of Agreement between the United States Department of the Interior and the United States Department of Energy for the Manhattan Project National Historical Park." 10 November 2015. https://parkplanning.nps.gov/document.cfm?parkID=482&projectID=57561&documentID=69127.
- "Scholar's Forum Report November 9–10, 2015." https://www.nps.gov/mapr/upload/ MAPR\_Scholars\_Forum\_Report-2-2.pdf.
- National Toxic Land/Labor Conservation Service. http://www.nationaltlcservice.us/2011/05/national-tlc-service-established.
- Nixon, Rob. *Slow Violence and the Environmentalism of the Poor.* Cambridge, MA: Harvard University Press, 2011.
- Norris, Robert S., and Hans M. Kristensen. "Global Nuclear Weapons Inventories, 1945–2010." *Bulletin of the Atomic Scientists* 66, no. 4 (2010): 77–83.
- Pred, Allan. *The Past Is Not Dead: Facts, Fictions, and Enduring Racial Stereotypes.*Minneapolis: University of Minnesota Press, 2004.
- Sandilands, Catriona. "Lavender's Green? Some Thoughts on Queer(y)ing Environmental Politics." *Under Currents: Critical Environmental Studies* 6 (1994): 20–4.
- Schwartz, Stephen I. *Atomic Audit: The Costs and Consequences of U.S. Nuclear Weapons since* 1940. Washington, DC: Brookings Institution Press, 1998.
- Sedgwick, Eve Kosofsky. *Touching Feeling: Affect, Pedagogy, Performativity.* Durham: Duke University Press, 2003.
- Sholette, Gregory. *Dark Matter: Art and Politics in the Age of Enterprise Culture*. New York: Pluto Press, 2011.
- Stoler, Ann Laura. "Imperial Debris: Reflections on Ruins and Ruination." *Cultural Anthropology* 23, no. 2 (2008): 191–201.
- US Nuclear Weapons Cost Study Project. "50 Facts about U.S. Nuclear Weapons." Washington, DC: Brookings Institution, 1998. https://www.brookings.edu/50-facts-about-u-s-nuclear-weapons.
- "Welcome to Nukapedia: *Fallout* wiki." http://fallout.fandom.com/wiki/Fallout\_Wiki.
- Wende Museum. http://www.wendemuseum.org/about-us.
- Widrich, Mechtild. *Performative Monuments*. Manchester: University of Manchester Press, 2014.
- Young, James E. "Memory and Countermemory." *Harvard Design Magazine* 9 (1999). http://www.harvarddesignmagazine.org/issues/9/memory-and-counter-memory.