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## Introduction

*Ours is indeed an age of  
extremity. For we live under the  
continual threat of two equally  
fearful, but seemingly opposed  
destinies: unremitting banality  
and inconceivable terror.*

(Susan Sontag, "The Imagination of Disaster").

Once a month at around 7:30 am a bus departs from Las Vegas. Securing a seat on this trip takes time, with travellers often booking a place a year in advance. Before boarding, passengers are told to leave behind their cell phones, laptops, cameras, binoculars, and any recording devices they might own as they start their journey to one of the most radioactive places on earth: the Nevada Nuclear Test Site.

Setting out from the Atomic Testing Museum, just east of the famous Las Vegas strip, 40 atomic tourists sit in air-conditioned comfort as their free, government sponsored, day trip begins.<sup>1</sup> The bus travels north up Route 95 for around 65 miles. Looking out of the window, those well versed in the history of US weapons development programs will catch a glimpse of some important but far too easily forgotten landmarks of the nuclear arms race. When the bus hits the highway and travels past Indian Springs, tourists looking out the window will spot the "closed town" of Mercury: a once thriving community that has become a radioactive ghost town. Back in the 1960s, Mercury housed around 10,000 residents, comprised of men and women looking to make a career in the industry of nuclear weapons development (see Wood). Here, in Mercury, workers had the opportunity to move to a model suburban American town specifically built for them by the Atomic Energy Commission (AEC), and raise their

families in supposed ease and comfort. Schools, restaurants, a movie theatre and bowling alley, and the famous “Atomic Motel” ensured that Mercury’s main street simmered with life. Today, only a skeleton crew currently occupies the site on a temporary basis after half a century of nuclear testing has rendered the town largely uninhabitable (Wills and McCurdy 1.1).

Further north, tourists eventually arrive at the ominous gates of the Nevada Test Site itself, a space of about 1,370 square miles, larger than the state of Rhode Island (Veitch 322). Guides are there to meet the tourists and eagerly show them around a stretch of land that the United States has been aggressively blowing up for the last 70 years. From 1951 to 1992, the United States conducted 100 atmospheric tests and 828 underground tests in the Nevada Test Site (Wiener 113-14). This zone is, as one sign notes, “Ground Zero” of the arms race (see Gallagher). It was here, according to peace activist and scholar Rebecca Solnit, that the “nation routinely rehearsed the end of the world” (57).

Tourists visiting the site come face to face with the lived and imagined violence of nuclear war. From the Sedan Crater, a man-made hole 1,280 feet in diameter and 320 deep, formed in 1962 when the detonation of a 104-kiloton device threw 12 million tons of earth into the air, to the Frenchmen Flats, where in 1954 the Federal Civil Defense Administration (FCDA) built a model suburban home, filled it with mannequin families and then blew it up for a television audience (see McEnaney; May; Bishop). At the Nevada Test Site the nuclear imaginaries that defined the making of modern America are thrown into eerie relief. For Tom Vanderbilt the test site stands as a forgotten landscape to a war never fought (Vanderbilt 88). Scars of the arms race litter the landscape, but if you look a little closer you can spot something else: environmental regeneration. Visitors to the test site often express surprise at “how green” parts of the test site are, after recent efforts by the Department of Energy have set out to turn parts of a once desolate contaminated landscape into an ecological reserve (Liverman 4.35). For Jonathan Veitch the dilemma of America’s nuclear entanglement is defined by a “surreal amalgam of secrecy, environmental devastation, scientific hubris, ideological self-righteousness, breath-taking utopian aspiration, game theory and realpolitik” (322). Perhaps then this fusion of progress and destruction, visible and invisible violence, protest

and the potential for change is best encapsulated by this ruined landscape that now functions as a tourist site (Wiener 113-14).

The purpose of this special issue of *RSA Journal* is to explore how the development of nuclear technologies shaped the culture, politics and society of the United States. Our aim has been to draw together leading scholars from a variety of disciplinary fields to offer new perspectives on how the power of the atom, its universalism and contested sustainability alike, has swayed the mindset and worldviews of generations of Americans. While the scope and interests vary, the essays that follow demonstrate the commitment of diverse scholars to unearth exactly “*how*” the mastery of nuclear technologies has shaped the contours of modern America.

Since the publication of Paul Boyer’s seminal cultural history of the atomic bomb, scholars have long been interested in how the advent of the nuclear age has acted as an agent of social transformation (Boyer 136). Scholars captivated by the culture of the bomb have built theoretical frameworks aimed at understanding the nuclear age and have published truly ground-breaking studies on themes ranging from public anxiety, government policy, civil defense, literature, art, nukespeak, diplomacy, strategic culture, nuclear subjectivity, individual experience, protest and resistance, environmentalism, gender, decolonization, and civil rights (see Pritikin; Freeman; Intondi; Miyamoto; Weart; Jacobs; Oakes; Freedman; Jones; Gavin; Trachtenberg; Maddock; Connelly; Collignon; Davis). The results of this body of scholarship are undoubtedly impressive. Yet scanning through today’s headlines it might appear that the contemporary relevance of this thriving debate has been put in the shade as a mere curiosity of the Cold War. Still, despite our seeming lack of current concern, once a year the science and security board of the Bulletin of the Atomic Scientists (BAS) updates its Doomsday Clock. Since 1947, the Doomsday Clock has given those with a morbid curiosity an indication of just how close scientific experts think we are to a global catastrophe. On 23 January this year the Doomsday Clock moved 20 seconds closer to the figurative midnight. Reiterating that humanity “continues to face two simultaneous existential dangers – nuclear war and climate change”, the editors of the BAS informed its readers that we are only “100 seconds” from obliteration (see Mecklin).

Today, these “100 seconds” might not seem all that immediate. In a recent article for *Modern American History*, Gretchen Heefner noted that nuclear studies must “grapple with the need to both inform and agitate in a world where concerns about nuclear Armageddon are frequently crowded out by nightly news of other events” (111-12). Indeed, at the time of writing this we are contending with issues that rightly seem far more urgent, from the spreading global pandemic Covid-19, to an escalating transnational protest against police brutality, to the onset of a global economic recession. Heefner’s contention that the nuclear is being “crowded out” has perhaps never seemed so prescient.

In this special issue, several of the authors take issue with Heefner’s call. It will come as no surprise that one of the common themes that emerges across the essays is the truly polarizing nature of nuclear discourses. If nuclear technologies have reshuffled the very vocabulary of American politics and society writ large, how can we as academics access and engage with these nuclear imaginaries? Our issue opens with Todd A. Hanson’s “Islands of The Bomb: (Re)Imagining Bikini Atoll through Archaeologies of Cold War Occupation and Destruction,” which effectively deploys archaeological evidence as a window through which to examine both the US occupation of the Bikini Atoll and the continuing efforts of Marshall Island inhabitants to protect their homes. Hanson’s essay is a timely consideration of the history of US nuclear testing in the Atoll which over the past years has seen a number of commercial actors – from bathing suits manufacturers, to beer companies, to children’s television – use the Bikini Atoll to market their own brands. For the author, closer consideration of the archaeological evidence left behind can offer clearer insights into both the acts of nuclear imperialism conducted by the United States and the efforts by local populations to maintain and control the Atoll as a nuclear heritage site.

The issue of contesting and resisting memories of nuclear technologies is also at the heart of Misria Shaik Ali’s essay “Memorializing Decommissioning: A Nuclear Culture Approach to Safety Culture.” Turning to semiotics as a medium through which we can better understand nuclear techno-scientific practices, Ali’s study of the Indian Point Energy Centre draws our attention to the activism that followed the decommissioning

and storage of radioactive waste. Located on the Hudson River, Indian Point has long acted as a constant, if controversial, fixture on the energy landscape of New York. Over the course of its operational lifespan, Indian Point has been the centre of a number of controversies with both residents and activists addressing the issues of the spillage and storage of toxic waste in 1993 and 1994. Ali adds to our understanding of this important site, arguing that a shift from safety culture to nuclear culture can help us to grasp the actual “meaning” of becoming irradiated and gain new insights into the recent debates about the plant’s decommissioning.

Dibyadyuti Roy’s “Apocalyptic Allegories: Resisting Strategic Nuclear Imaginaries through Critical Literacy” picks up this thematic thread of abstraction and dehumanizing often associated with nuclear imaginaries, and offers a careful examination of the textual elements of nuclear-activity and nuclearization in two films, *The Matrix* and *The Book of Eli*. For Roy, Western nuclear narratives often lack the intimacy we see in other cultures. Outside of the populations of the Pacific, whose encounters with the bomb have been both tragic and with an all-encompassing impact, Anglo-American nuclear imaginaries have, at times, minimized human suffering, with visions of a total global apocalypse erasing individual trauma. Yet, Roy argues that *The Matrix* and *The Book of Eli* resist this trend, and proffer a reflective, revelatory approach to the apocalypse, substituting militarism with humanism by building empathy.

In “Southern Wastelands: Alas, Babylon, The Road, and the A-Bomb in the Garden,” Marco Petrelli turns towards the questions of regionality as he explores the role of the American South in nuclear culture. For Petrelli, southern literary culture provides a unique insight into how apocalyptic narratives often have to contend with the two opposing ends of the teleological spectrum. Drawing upon a pastoral tradition, Petrelli argues that southern literature has long been connected to an Edenic realm. While this connection between the South and the Garden of Eden clearly erases centuries of racial violence, trauma, and the exploitation of African American bodies, this ideal of returning to an eco-mythical ground has held sway over the southern literary imagination. What happens to this literary tradition when the Apocalypse occurs? Through a reading of Pat Frank’s *Alas, Babylon* (1959), and Cormac McCarthy’s *The Road* (2006),

Petrelli teases out how southern literature has responded to the end of the world.

Preoccupation with the end of times also plays an important role in William M. Knoblauch's "Spaceship Earth: Representations of Life After the Apocalypse in the Nuclear Age." Tracing the evolution of nuclear narratives, Knoblauch argues how impressively resilient Cold War cultural traditions have embedded themselves across the decades into visionary dreams of space settlement. While fears of geopolitical standoffs have been somewhat replaced by growing concerns about climate change, Knoblauch makes the point that our earlier visions of an earthly Apocalypse persist. With the recent launch of Elon Musk's Space X, Knoblauch also invites us to consider how these ideas might evolve in an age of increasing corporate control over Earth's expansion into space.

Finally, in "Beyond the (Ka)Boom: Nostalgia, Gender and Moral Concerns in the Quality TV Series *Manhattan*," Sandra Becker explores how television has transformed and keeps transforming nuclear settings into familiar tropes of American popular culture. Becker praises the series for drawing attention to the mythopoetic function played by Los Alamos scientists; in so doing, *Manhattan* abstracts them from their contemporary socio-cultural milieu and elevates them to emblems of the normalization of the bomb. Against the backdrop of an imminent catastrophe, everyday life flows through gender interplays, racial dynamics, and personal interactions in a way that makes the nuclear ubiquitous and latent at the same time.

Since 16 July 1945, as military officials, government experts and scientists watched the glow of a 19-kiloton explosion in the Trinity Test Site in New Mexico, we have been living in the shadow of the atomic bomb (Fiege 601). The nuclear era impinged on us with seemingly insurmountable paradoxes: the rationalization of mass extinction; the subordination of science to politics; a structural existential anxiety. Discussions about nuclear doom not only survived the Cold War but came to pervade our contemporary consciousness in numerous ways. Taming the nuclear beast progressively became the cipher of modern statecraft, as well as of the various cultural and artistic representations of it which cathartically warned against the dire consequences of its release (Holloway 385).

As the essays of this special issue show, nuclear criticism has moved away from the simplistic reliance on a long-standing tradition of non-use of nuclear weapons – the nuclear-taboo as Nina Tannenwald calls it – in order to come to terms with the all-encompassing marks that the nuclear age has left on our modern civilization (Tannenwald 7). The strength and cogency of nuclear criticism, however, are still largely dependent on the nuclear awareness that shapes our collective imaginary. For this reason, we hope that the articles in this special section may shed some light on how our understanding of the nuclear age will – and should – continue to evolve in the years to come.

## Notes

<sup>1</sup> The US Department of Energy, National Nuclear Security Administration, Nevada Site Office, provides free general interest tours on a monthly basis. See <<http://www.nnss.gov/pages/PublicAffairsOutreach/NNSSstours.html>> for further information on tours and documents related to the test site.

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