The End of the World as We Know It

*The Nuclear Culture Source Book* considers the “lived experience of the uncanny nature of radiation” ushered in by disasters such as Chernobyl, Three Mile Island, and Fukushima.

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Just as science fiction has become speculative fiction, the Great Acceleration, the Anthropocene, the Capitalocene and the Chthulucene now inundate theory, science and art.

Dr. Ele Carpenter, leader of the Nuclear Culture Research Group, has become a key figure in the interdisciplinary discussion of, and artistic response to, mankind’s self-destructive tendencies. The Nuclear Culture Source Book, a culmination of four years of research on nuclear material culture in technology and art, is her definitive introduction to Nuclear Culture and Aesthetics. As the volume’s editor, Carpenter has gathered the work of 60 artists and 12 writers working around the immateriality of radioactive isotopes, on site and in theory.

With some urgency, the Source Book directs a conscious move away from the distant spectacle of a nuclear sublime — remote and immeasurable — towards the immediacy of the “lived experience of the uncanny nature of radiation” ushered in by disasters such as Chernobyl, Three Mile Island, and Fukushima. Nuclear materiality, sites and non-sites, modernity, and inheritance are investigated through artists and thinkers like Chim↑Pom, Isao Hashimoto, Susan Schuppli, James Acord and Timothy Morton.

Each subject is framed between artworks and essay, beginning with the Anthropocene — our current, human-defined epoch instigated by the first atomic bomb. Subsequent weapons testing has ensured a “globally synchronous signature,” with
radioisotopes appearing on every continent and both poles.

The Fukushima disaster has only aggrandized this signature, provoking an era in which artists of all nations are driven to engage with nuclear events, in situ. Such an engagement “requires a long-term commitment to researching specialist knowledge and building relationships across disciplines,” and a cross-cultural, interdisciplinary spirit does saturate the Source Book’s artists and writers, buttressing the wide examination of our nuclear problem.
Some of the strongest artworks are drawn from *Don’t Follow the Wind* — the 2015 international exhibition installed, with the agreement of former residents, within the Fukushima Exclusion Zone. The project was co-organized by the artists Eva and Franco
Mattes, whose “Fukushima Texture Pack” (2015) — a collection of surfaces photographed inside the Exclusion Zone — opens the Source Book. The stark, deceptively ordinary surfaces of sliding doors, tatami mats, grass, or pavement are paired with each chapter’s title page, underlining radiation’s uncanny yet domestic disposition. “The closer you get,” Carpenter reminds us, “the more abstract and everyday the nuclear becomes.”

While the Mattes are keen to document the invisibility of fallout, the attempt to the so-called “dyeing” of radiation — its forced materialization — is thoroughly demonstrated by the Source Book. Carpenter presents several cross-disciplinary efforts to mark radioactive material, from the development of Nuclear Semiotics in the 1980s to Toshiba’s gamma camera (a recent invention capable of capturing the density of radioactive isotopes by color).
Marshallese commemorate their annual Nuclear Victims and Survivors Remembrance Day by combining archival atomic test imagery with traditional song and dance. From “Global Hibakusha Project” (2014) by Mick Broderick and Robert Jacobs (photograph courtesy Mick Broderick)

Such contrast agents were posited earlier in the Anthropocene, such as *Explosions Bleues*, Yves Klein’s 1958 proposal to the International Conference for the Detection of Nuclear Explosions, which suggested the coloring of all future atomic explosions in the artist’s patented International Klein Blue — a spectacular effort to visibly render fallout in the interest of public safety.

More recently, Shimpei Takeda’s project, “Traces” (2011), by directly exposing photosensitive material to contaminated sites in Japan, similarly merges the sublime and uncanny as the radiation bleeds galaxies in his eerie photographs, soiling the stars.
Nuclear materiality concentrates in Taryn Simon’s “Black Square XVII” (2006-ongoing) — a Malevichian square made from vitrified nuclear waste. Resembling polished glass, the square is currently undergoing the 1000-year vitrification process in a nuclear waste site outside of Moscow.

Similarly, Trevor Paglen’s *Don’t Follow the Wind* work, “Trinity Cube” (2015), is a compressed mixture of Trinitite (the glassy mineral formed on the desert surface after the US’s first nuclear test) and irradiated broken glass collected from the Fukushima Exclusion Zone—a marrying of the sublime and uncanny. Indeed,
Japanese geochemists have only just discovered a “glassy soot” in the air filters of Tokyo — caesium-rich, non-soluble fallout embedded in silicon oxide glass created by the extreme heat of Fukushima’s meltdown.

Philosopher Timothy Morton closes the *Source Book* in a discussion of the hyperobject, “a thing so massively distributed in time and space that we can’t point to it easily.” Hyperobjects include irreversible ecological agents such as global warming or nuclear radiation, phenomena that defeat traditional worldviews. Like the X-ray photon, illumination becomes irradiation, revelatory yet harmful — uncanny, “weird.”

Morton is concerned with our transitory reactions to, rather than our rendering of, radiation. The invisible agency of radiation as hyperobject offers glimpses into a version of the “end of the world” — the end of a stable human perspective. Our response to this new and uncanny reality must be exposed rather than excluded. The hyperobject is then “a message in a bottle from the future,” with radiation as an intimate, illegible omen. For
Follow the Wind) Morton, and many of the Source Book’s contributors, it is the work of responsive artists and scientists to decipher it.

As nuclear waste can last up to 100,000 years, it will be humanity’s most enduring legacy. An imperative update to art’s expanding role within our volatile era, The Nuclear Culture Source Book presents a new critical language for the nuclear, opening up political and artistic perspectives alike. Though a few of the artworks and interviews do feel like filler, the collection as a whole is an unprecedented and invaluable resource to the any artist, scientist, historian, philosopher, or generally concerned citizen of the world. Truly, this is a subject that demands our attention — increasingly so as world powers, and economically driven opinions on the environment, shift as drastically as the Pacific plate.

The Nuclear Culture Source Book, edited by Ele Carpenter (2016) is published by Black Dog Publishing and is available from Amazon and other online booksellers.