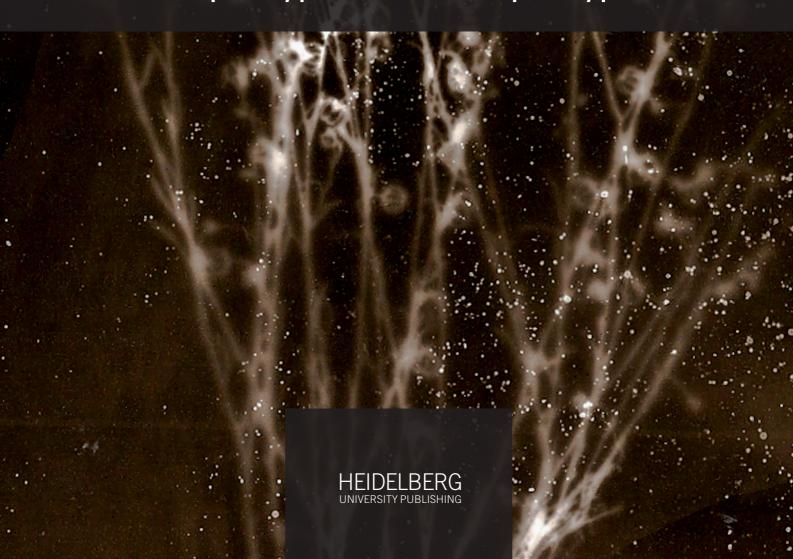
SPECIAL ISSUE
Nuclear Ghosts

Edited by
Jenny Stümer

# APOCALYPTICA

Journal for Apocalyptic and Post-Apocalyptic Studies



## Apocalyptica No 1/2023

**Special Issue: Nuclear Ghosts** 

Edited by Jenny Stümer



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**Layout:** philotypen GbR | Moritz Ahrens & Leonard Keidel | Dortmund, Germany | www.philotypen.de

Appearence: 2 issues per year

Apocalyptica is a double blind peer reviewed journal. Submitted articles are subject to a double blind review process that decides whether they will be included in the journal.

**Bibliographic information published by the Deutsche Nationalbibliothek**The Deutsche Nationalbibliothek lists this publication in the Deutsche Nationalbibliografie; detailed bibliographic data are available in the Internet at http://dnb.dnb.de.



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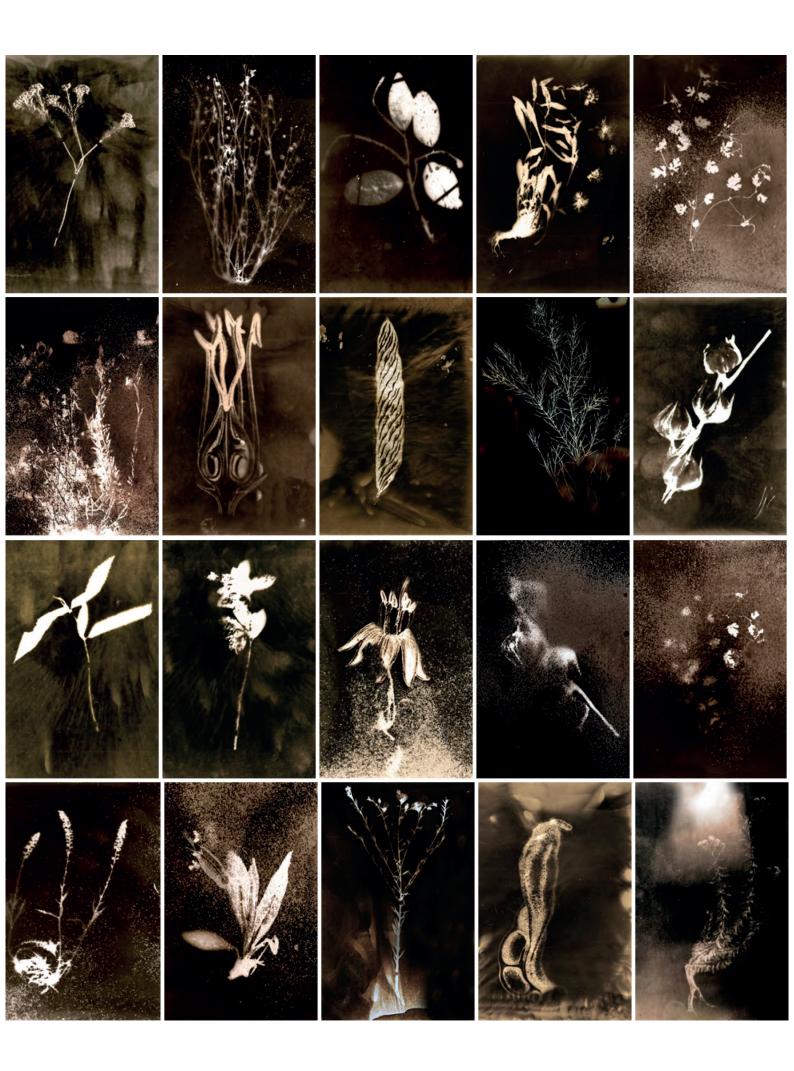
Published at Heidelberg University Publishing (heiUP), 2023 Heidelberg University/Heidelberg University Library Heidelberg University Publishing (heiUP) Grabengasse 1 | 69117 Heidelberg, Germany | https://heiup.uni-heidelberg.de

The electronic open access version of this journal is permanently available on Heidelberg University Publishing's website: https://heiup.uni-heidelberg.de doi: 10.17885/heiup.apoc.2023.1

Text  $^{\circ}$  2023, the authors

eISSN 2751-7721

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LINUM STRICTUM, EXCLUSION ZONE, CHERNOBYL, RADIATION LEVEL: 1.7  $\,$  SV/H , ANAÏS TONDEUR, CHERNOBYL HERBARIUM, 2011 – ONGOING

Some images in Anaïs Tondeur's "Chernobyl Herbarium" are the explosions of light. Others are softly glowing, breathing with fragility and precariousness. The explosive imprints are, in effect, reminiscent of volcanic eruptions at night, hot lava spewing from the depths of the earth. Even assuming it is not the actual trace of radiation (which the specimens in the herbarium have received from the isotopes of cesium-137 and strontium-90 mixed with the soil of the exclusion zone) that comes through and shines forth from the plants' contact with photosensitive paper, the resulting works of art cannot help but send us back to a space and time outside the frame, wherein this Linum Usitatissimum germinated, grew, and blossomed.

The images are the visible traces of an invisible calamity, guided across the threshold of sight by the power of art. The literal translation of the technique used here, photogram, is a "line of light." Not a photograph, "the writing of light," but a photogram, its line captured on phot sensi- tive paper, upon which the object is placed. In writing, a line is already too idealized, too heavy with meaning, overburdened with sense. In a photograph, light's imprint is further removed from the being that emitted or reflected it than in a photogram, where, absent the camera, the line is allowed to be itself, to trace itself outside the system of coded significations and machinic mediations. To impose itself from up-close. Touching... It endures, etched, engraved, engrained—the energy it trans- ported both reflected (or refracted) and absorbed. Much like radiation, indifferently imbibed by whatever and whoever is on its path (the soil, buildings, plants, animals, humans) yet uncontainable in any single entity whose timeframe it invariably overflows. Through her aesthetic practice, Tondeur facilitates the explosions of light trapped in plants, its lines dispersed, crisscrossing photograms every which way. She liberates the traces etched into them without violence, avoiding the repetition of the first, invisible event of Chernobyl and, at the same time, capturing some-thing of it. Release and preservation; preservation and release: by the grace of art.

Excerpt from Michael Marder and Anaïs Tondeur. 2016. *The Chernobyl Herbarium: Fragments of an Exploded Consciousness*, London: Open Humanities Press.

Apocalyptica
No 1 / 2023
DOI: 10.17885/heiup.
apoc.2023.1.24898

### Marisa Karyl Franz Ordinary Hauntings in Irradiated Land

Abstract: Examining three art projects that rely upon the materiality of nuclear exclusion zones in Chornobyl and Fukushima, I propose a framework of haunting to understand how everyday things become saturated with the everyday lives of those who lived with them. These art pieces (Michael Marder and Anaïs Tondeur's *Chernobyl Herbarium*, Eva and Franco Mattes's *Fukushima Texture Pack*, and Ai Weiwei's *A Ray of Hope*) do not represent or document the disaster as momentary or as spectacular, but as a slow durational violence that is experienced in the daily lives of people, the land, and the material things left behind after evacuation. Rather than an aestheticisation of disaster itself or of the Zones as post-apocalyptic pastoral, these works haunt us with the ordinary affect of human habitation in what are now exclusion zones and mourn the loss of a familiar and everyday place of home.

Key Words: Hauntology; Ghosts; Affect; Art; Nuclear Exclusion Zone

#### Introduction

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Franz: Ordinary Hauntings in Irradiated Land

It could be dawn.

The light, crumpled like sheets.

The ashtray full.

A shadow multiplies on four walls.

The room is empty.

No witnesses.

But someone was here.

...

Come in, look around. No one's here, Just the breathing air, crushed

As though by a tank.

A half-finished sweater remembers someone's fingers.

A book lies open, marked by a fingernail.

(How amazing, this silence beyond the boundary!)

•••

(Zabuzhko 1996, 43).

Zabuzhko's poem, Prypiat — Still Life commands us, in the Ukrainian original text—"ΥΒἰἄ∂imь!" (Uviidit') meaning "[c]ome in!" in the imperative to enter into the space of Prypiat (Laurila 2020, 261). Written after the disaster at the Chernobyl Nuclear Power Plant in a post-Soviet context, Zabuzhko places us inside the exclusion zone, 'beyond the boundary,' in the silent and still space of the town of Prypiat. Prypiat here is framed as a still-life, or in Ukrainian a натюрморт (natiurmort) from the French term nature morte (literally 'dead nature') for the artistic tradition of presenting unmoving things (dead animals, cut flowers, bowls of fruit, a wine glass, or a wrinkled table cloth). The organised and posed things offer a semiotic structure to express ideas of desire, delight, sacrality with a substratum of death and decay running throughout (Martin 2021, 564). Zabuzhko's poem presents the reader with unmoving things—the half-finished sweater or the marked open book—as tactile things connected to the fingers and nails of someone, someone not here in the silence. The absence of people is traced in the symbolic language of the unmoving material the reader is commanded to look at in the breathing crushed air. Everyday things, the tactile mundane materiality of life, contain the traces of those who were there before; the reader enters the intimacy of space without witnesses to look around in the liminal space of a possible dawn.

1 N.B. except when referencing specific titles of works, the Soviet constructed nuclear plant by name, or in quotations from other texts, I use Ukrainian transliterations of Chornobyl and Prypiat rather than the Russian transliterations.

The imposition of the reader crossing over into the place of someone else's home to peer into the mundane material of everyday life presented before them for viewing, here as a still life, sits at the heart of this article. Drawing on critical theories of haunting, affect, trauma, and memorialization, I consider how everyday objects are used by artists to document and remember the ongoing decay, death, and destruction of nuclear disaster in Chornobyl and Fukushima. Like Zabuzhkho's reader, the artists I explore here are not residents of the spaces they are in; they enter afterwards in the time of fallout, a time of aftermath that is "both material and conceptual, a way of talking about legacies and futures, toxics and natures, perceptions and misrecognitions" (Masco 2021, 24). Disasters such as the 1986 meltdown of the Chernobyl Nuclear Power Plant built by the Soviet Union inside the Ukrainian Soviet Socialist Republic and the more recent 2011 disaster at the Fukushima Daiichi Nuclear Power Plant in Fukushima, Japan, are durational. It is a slow violence that continues after the event that lingers and expands but becomes ignored; fallout time as a time of slow violence is, in Rob Nixon's words, "unspectacular time" that goes ignored "in an age that venerates instant spectacle" (Nixon 2011, 6). The artists' works I examine take this unspectacular time and present viewers with unspectacular materials from the everyday things inside the exclusion zones established around the epicentres of the Chornobyl and Fukushima reactors.

Nuclear fallout is critically "both collectively and asymmetrically distributed, marking everyone to a degree while having an intensified effect on specific communities, ecologies, and bodies" (Masco 2021, 25). These asymmetries become pronounced along lines of power and privilege, often intersecting with race, wealth, experiences of colonization, and geopolitical power; the artists I work with are internationally acclaimed and established, their turn towards unspectacular time and unspectacular everyday material rests upon their own spectatorship and spectacle. I approach these works to see how the turn towards ordinary material as embedded in the durational normality of everyday life becomes a focal point for connecting the outsider-artist to the intimacy of the space the imperative entrance into the still-life. These familiar things become a spectral presence of felt intimacy. The half-finished sweater is haunted by someone's fingers, but the artists resist claiming and co-opting that person as their own, instead they enter this space as part of a collective fallout age while also sheltered from the intensity of its effects. The first piece I address is a collaborative memoire-essay and photography project by Michael Marder and Anaïs Tondeur titled The Chernobyl Herbarium: Fragments of an Exploded Consciousness (2016). The second is another

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collaborative project, also from 2016, titled *Fukushima Texture Pack* by Eva and Franco Mattes. Both Mattes's work and the final work, Ai Weiwei's *A Ray of Hope* (2015), were part of the art project *Don't Follow the Wind* organized by Chim<sup>Pom</sup>, an artist collective started in Tokyo in 2005.

Don't Follow the Wind was a collaborative long-term project rooted in the Fukushima Exclusion Zone in "homes and places of work lent by former residents, all of which are contaminated" (Hirsch and Waite 2021, 11). The former residents are anonymous, but the project became a space of entanglement where the artists, curators, and local residents became part of a "temporary and translocal" community that simultaneously was witness to the ways in which the "contamination has displaced and ruptured communities" (12-13). While some of the artists involved in Don't Follow the Wind are Japanese and experienced the Fukushima disaster as tied to local intimacy, national identity, and within a lived experience of Japanese nuclear history and politics, the artists I focus on are foreign to the space and, as such, were invited in like the reader in Zabuzhkho's poem. Both Weiwei and the Mattes's relationship to Fukushima, and Tondeur's connection to Chornobyl, is more unfixed and their works reflect a desire for familiarity from a distance. They are unable to speak in the first-person and do not seek to speak as ventriloquists voicing the experiences of others. Instead, the artists turn to ordinary things that become uncanny through their duality as familiar materials of everyday life that connect the outsider-artists to the space and as unfamiliar materials of a radioactive everyday life that warp recognition and create a distance as the artists are not living nor inheriting an intimate durational experience with the zones as home. This uncanniness of defamiliarizing the familiar draws us into the 'could be dawn' time where the artists reach out to grasp at the intimacy of space but are always already in this corpuscular liminal space as visitors and strangers; here, they can only turn to the still life of their own familiar everyday now haunted by nuclear radiation and visit with the ghostly traces of other lives. All of these artists I consider here use different materials and artistic forms that have themselves different affordances for circulation and engagement. Nevertheless, they share a focused attention on the mundane materiality of everyday life as a point of affective intimacy. The unspectacular experience of slow violence becomes a still life of mundane things simultaneously rendered extra-ordinary in their saturation with radioactive contamination and utterly ordinary in their materiality as local plants, walls, and homes.

The ordinary, here, does not signal a lack of importance or value; rather the opposite, the ordinary is saturated with meaning and forms the foundational frameworks of our lives. Kathleen Stewart explores the concept of

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everyday experience, feeling, relationships, and embodiment in her book *Ordinary Affect*. Here, moving between theoretical writing and memoire, she exposes the meaningfulness of mundane life. Critically, experiences of violence, loss, pleasure, longing, and other acute feelings are all included within this ordinary life. While moments of intensity, of trauma, "rise out of the ordinary and then linger, unresolved, until memory dims or some new eruption catches our attention" these are incorporated into the ordinary and become "erupting events" that draw "our attention to the more ordinary disturbances of everyday life" (Stewart 2007, 74). The erupting events of Chornobyl and Fukushima broke through the ordinary, but the ordinary settles back in and reforms around new everydays.

Stewart's ordinary affect is an inhabited world of relations, responses, interpretations, and ideologies. It can be banal, though at times it can also be entrancing, but it forms a familiar substratum that extends beyond oneself and into an everyday world of other people, other things, other animals, and other natures. Stewart writes, "[o]rdinary affect is a surging, a rubbing, a connection of some kind that has an impact. It's transpersonal or prepersonal; not about one person's feelings becoming another's but about bodies literally affecting one another and generating intensities: human bodies, discursive bodies, bodies of thought, bodies of water" (128). This ordinary space is often invisible or ignored, fading into a momentum of everyday lives, feelings, relations, and spaces; however, at moments the normalcy becomes something observed, in still life (19).

This attention to everyday space as layered with the affective intimacy of daily life has also been an area of inquiry within the field of hauntology. While the term originates with Derrida's assertion of Marx haunting Europe, the field of hauntology has grown to consider ghosts as both literal and metaphoric entities that act as remnants of the past made present (Derrida 2006). Shifting from Derrida's framing of haunting as a potentiality of past that is yet to come towards a more affective and embodied form of haunting, I take ghosts as having an ontological reality in this mortal world as beings that are forces of remembrance and voices of trauma. These ghosts tend to remain located in the spaces of intimate places. These intimate ghosts haunt in liminal places, places betwixt and between, and they also create liminal spaces by their own inbetweenness as both dead and animate. Hauntings are rooted in cultural and religious traditions and ghosts do not always move easily across the limits of our own fluencies. I take ghosts not as a metaphor, but as a theoretical framework for naming an extra-ordinary insistence of emotional, intimate, and relational presence in those uncannily everyday spaces that somehow resist the ordinary affect we associate with them and instead unsettle us

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as a tingling sensation or a flash in the corners of our eyes. Michael Mayer-feld Bell proposes a view of haunting wherein "ghosts—that is, the sense of the presence of those who are not physically there—are a ubiquitous aspect of the phenomenology of place[.] [...] Places are, in a word, personed—even when there is no one there" (813). The examples Bell uses range from creeping into forbidden places to revisiting old haunts where his family spent their summers going to the Tower of London. What unites these different examples is a sense of place that is rooted in the ordinary affective experience of being in relationship with people no longer present, which becomes a haunting.

Some ghosts give voice to the past traumas remaining and asking for recognition of hidden, unresolved, and generational violence. Avery Gordon's Ghostly Matters: Haunting and the Sociological Imagination shares Bell's expansive view of haunting as an experiential and relational connection, though, for her, ghosts are always present because of harm (Gordon 1997, xvi). While Gordon's limit on the affective landscape of ghosts does not address the broader range of relational ties that entangle the presences of those not physically there to the material world around us, her insistence on trauma as a root of haunting productively anchors trauma to the ordinary world around us. In the case of nuclear exclusionary zones, the harm is omnipresent. The land bears the traces of radiation as do the bodies of generations of people. The biological citizenship of those impacted by Chornobyl and Fukushima is about place and the living beings that become entangled with the invisible traces of radiation that remain. Outside of this are the artists I consider who enter into these fallout spaces without the intimacy and embodiment of local residents and former residents. As in Zabuzhkho's poem, these guests do not share space with witnesses, but rather encounter a still life saturated with the affective hauntings of ordinary life. Through these artworks, we enter into unpopulated evacuated zones that are, nevertheless, personed.

## Haunted Traces of Everyday Lives: Ghosts of Place and *The Chernobyl Herbarium*

On April 26, 1986, a series of explosions in the Number Four Reactor at the Chernobyl Nuclear Power Station damaged the structure and triggered a partial meltdown of the core. There are ranges in the estimates of the exact number of deaths and the exact amount of radiation released into the area of Chornobyl and the nearby town of Prypiat; the World Nuclear Association lists two initial deaths of workers at the power station and

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twenty-eight more people in the weeks following from acute radiation poisoning with an average radiation dose of 31 mSv (millisievert) (World Nuclear Association 2022). The International Atomic Energy Agency also cites that there were twenty-eight deaths (though whether this is inclusive or exclusive of the two workers' deaths is unclear) and notes that "while 19 ARS [acute radiation syndrome] survivors died up to 2006, their deaths had been for various reasons, and usually not associated with radiation exposure" (International Atomic Energy Agency 2005). The World Health Organization claims that "fewer than 50 deaths" can be attributed to the radiation from the disaster (World Health Organization 2005). These numbers offer a minimized impact of Chornobyl on the lives, human and non-human, that were irreparably altered by the radiation. Death is not the only loss or harm we can experience; radiation has caused thousands of cancer diagnoses, general damage inherited in the bones and cells of the descendants of those exposed, and a 30km exclusion zone demarcating the area of severe environmental damage. While Chornobyl is an epicentre of radiation, globally, after the start of nuclear weapons testing "the isotope [Strontium-90] is present in the dental makeup of anyone born after 1963" (Marder and Tondeur 2016, 38). The traces of Chornobyl and other epicentres of radioactive testing, storage, detonation, and meltdown are an everyday effect that is unevenly distributed with some experiencing death, illness, fear, or nothing at all but with shared markers of the world-altering exposures of atomic radiation from human-made sites.

Michael Marder and Anaïs Tondeur's The Chernobyl Herbarium: Fragments of an Exploded Consciousness provides a "humble share to a collective grappling with the event of Chernobyl [...] keenly aware that we [Marder and Tondeur] are endeavouring to think the unthinkable and represent the unrepresentable" (Preface). In this, the work provides a personal and fragmented account of the fallout of Chornobyl; we encounter plants as cuttings rather than durational and living things emphasising the sense that this is a piece of something much larger and longer than is represented here only in the part. Tondeur's images were not originally created for this volume, but exhibited and encountered by Marder, who then pursued a reframing of them as part of an "artistic-philosophical collaboration" which became The Chernobyl Herbarium publication (32). Alternating pages feature Tondeur's photograms and Marder's writing that moves between memoir and treatise reflecting on his own relations to Chornobyl and offering philosophical fragments on living in a fallen (fallout) world.

Tondeur's photograms were made by placing cuttings of plants on photosensitive paper and exposing them to light. The photograms trace

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the imprints of radioactive herbarium specimens that are today grown in the exclusionary zone by Martin Hajduck from the Institute of Plant Genetics and Biotechnology at the Slovak Academy of Sciences (Preface). The plants are part of the new growth in Chornobyl; Tondeur's images invite us to consider the relationship between the physical specimens grown by Hajduck and their illuminated forms in the photograms as created herbaria, at once living and also dead. Critically, Marder writes, "the photograms do not represent anything. They only catalogue the traces of flowers, leaves, stems, and roots, along with the remnants of radiation trapped in them" (66). The collaboration is a dialectic between the human voice of the author and the photographer and the non-human form of the plants. This form is the voice of the plant, "Each branch, shoot, and leaf located in a particular portion of a geranium [...] is the outcome of a lived vegetal interpretation of the environment: the direction and intensity of sunlight, the amount of moisture in the air, and so forth. Plants' living forms are their semantic structures" (200). The plants are not symbolic or representative of something else because they are portraits of what they are. Tondeur's photograms appear as white skeletons that demarcate the physical body of the plant where it was placed on the paper. Around this white form is a sepia-toned background sometimes appearing as a watercolour-like wash of dark and light tone and sometimes dappled with dots of light like flour thrown on a countertop when baking. At the bottom of the images is a label with the taxonomical name of the herbarium specimen, the phrase "Photograph on rag paper, 2011-2016//Exclusion Zone, Chernobyl, Ukraine," and the stated radiation level in microsieverts per hour. The printed names, Linum usitatissimum (flax), Baeckea linifolia (flaxleaf heath myrtle), and Byrsonima lucida (gooseberry), frame the pieces as specimens that appear as pressed and mounted plants common in her-

bariums around the world.

Looking at the photograms, the impulse is to see the light emitted from the plants as radiation emanating from the specimens. The invisibility of radiation resists us however, and, instead, to see it we must look inside the plants and witness their adaption and absorption of the radia-

tion. Tondeur writes,

The silhouettes of plants are unchanged. Cesium-137 is at work. The mutation happens from the inside. Biogenetic studies on crops planted in the shade of the Chernobyl power station are revealing a subtle transformation, inaccessible to the naked eye. The core cells of the plants have undergone a transformation. It is not surprising that the

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Ukrainian population, exposed to high levels of radiation, has named it *the invisible* enemy (Marder and Tondeur 2016,73).

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The plants in this herbarium are dead. Their sampling depends upon the cutting and killing of the living form. While, at times, these images appear like x-rays revealing the inside where mutations happen making the enemy visible, what we actually see are the bones of what was once living, where the plants are changing their protein structures to better resist heavy metals and adjusting their carbon metabolism in response to the environmental changes around them in the Zone (Marder and Tondeur 2016, 22).

In both critiques and interpretations of Tondeur's work, as well as that of other artists who are depicting mass destruction and death, there is a desire to interpret the plants as stand-ins for, or replacement of, human populations. In her book, Art and Nuclear Power: The Role of Culture in the Environmental Debate, Anna Volkmar offers a summary of "ruin porn" as "a sneering neologism attributed to writer and photographer James Griffioen that describes the aesthetic exploitation of urban decay while encouraging ethical detachment from the sites that are portrayed" (2022, 54). A characteristic of 'ruin porn' is the absence of people, disconnecting land, industrial ruin, and loss from the lives of those who lived it (Strangleman 2013). The aesthetic removal of people from documentations and representations of trauma and extreme violence is a common practice in memorialization more broadly. Jennifer Hansen-Glucklich, in Holocaust Memory Reframed: Museums and the Challenges of Representation, notes the removal of people from presentations of mass destruction—here the Holocaust—writing about the common exhibitionary aesthetic of the piles of shoes, clothes, rings, etc., "museum visitors begin to perceive the piles of objects as the tortured remains of the victims themselves [...] Metonymic representation contributes unwittingly to the further dehumanization of victims by reducing them to a heap of indistinguishable, anonymous objects" (2014, 135). Both the Holocaust and Chornobyl have been framed as 'unthinkable' and 'unspeakable;' and so in memorialization there is an articulated need for a new semiotic system to convey something that extends beyond our capacity to communicate and to remember the events, the loss, and the people. The framework of representation, symbolic metonyms, and memorials become graspable and speakable systems of communication. But they are not infallible. Chornobyl, Marder notes, was a site of destruction before the powerplant was built. The pogroms, the Russian Civil War, and the German Occupation saw the annihilation of the Jewish population of the area; "in 1941, the surviving Jewish residents of Chernobyl were shot en masse right at

the cemetery, where their ancestors were buried;" this "other Chernobyl" is forgotten and buried underneath radioactive plants, soil, debris, and rock (Marder and Tondeur 2016, 42). Memorialization as a process of creating signs and symbols to anchor collective memory and mourning can become meaningless or silencing in their representational aesthetic. In ruin porn, the removal of people is an aestheticisation that turns away from the ethical entanglements of human lives bound-up in the decaying space; in Hansen-Glucklich's critique, the standing-in of objects for people is an attempt at documenting loss, but, in actuality, reinscribes a dehumanisation and depersonalisation that is part of the violent logics of genocide.

Tondeur's photograms show the living. The plants are dead; we see only the imprint of the clippings. The living—plants, animals, and people are elsewhere. Magdalena Zamorska, in Weedy Materiography: Perennials, Humans, and Posthumous Intimacies, looks at the use of plants in Tondeur's (amongst others') work to frame the fragmentary specimens as part of a "botanical melancholia" wherein the "biogenic deaths of the plants [...] [are part of] the process of bewailing the loss of the material, sensorial, corporal, unique and singular life of a plant, and not of a species, a floral community or an abstract or generalized plant life" (2020, 142). John Ryan, who introduced the term botanical melancholia, states that "the distinction... between biogenic and anthropogenic death collapses through the interpenetration of human and vegetal living and dying" (2018, 200). While Ryan is interpreting John Kinsella's poetry, this collapsing of plant and human into a shared space of death and mourning is one of interconnected experience. Rather than a broader environmental melancholia (Lertzman 2015), this isolation of a singular plant as a specimen and fragment, Zamorska argues, allows us to foster an intimacy with the plants that is predicated on the care-filled attention of the photographer for whom the plant died, allowing the plant to gain a "'personhood' along with significance and respectability" (Zamorska 2020, 143). The singularity of the dead specimen isolates our attention on the unmoving plant a fragment of an exploded consciousness that is unknowable in its totality—the death of one fragment does not become a memorial encompassing all the dead.

Presentations of living plants in photographs of Chornobyl often are a motif in the vast assemblage of images depicting a depopulated land that have formed an archetype of the post-apocalyptic ruin porn aesthetics. Michelle Bentley, in her article *Immersive Ruin: Chernobyl and Virtual Decay*, quotes photographer Will Wiles stating:

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We all felt we knew the place before we travelled. Photographers and the urban explorers have saturated the internet with images of the city[.] [...] Seeing its points of interest—those must-see attractions—for oneself has an unreal sense of heightened reality that leads to a nagging case of authenticity anxiety (2018, 185).

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The decaying Ferris wheel, the bumper cars, the classrooms, and the water-stained posters of Lenin circulate online and in books with various frames and angles, but always speaking of the absence of people through the post-apocalyptic remnants overtaken by living plants reclaiming the manufactured spaces of Chornobyl and Prypiat.

Tondeur's photograms document something very different. It is not a world marked by this narrative of total annihilation and she "did not intend to represent the advent of an apocalypse;" Marder insists that in these photograms there "is no aesthetics of war, suffering, and death [...] Vegetal imprints on photosensitive surfaces do not repeat the violence of [...] Chernobyl. They resonate with mute suffering and give it a chance to speak, without resorting to voice and words [...] without adding or subtracting images and representations, without as much as depicting violence qua violence" (Marder and Tondeur 2016, 32). Unlike the piles of shoes that stand in for the dead, or the ruin porn images that crop out the affective experiences of loss and suffering that underlie the ruins, Tondeur's photos neither ignore nor represent people. They do not reach out and merge anthropogenic and biogenic death into a botanical nostalgia where we experience grief through the death of the plant. The plants, we are told, while "rooted in the ground, [where] they are of course unable to escape the harmful effects of radioactivity [...] are also more adaptable[.] [...] Their exposure to the world is of one piece with learning from the world and giving plenty of things back to it. Only our, human, exposure betokens pure vulnerability, passivity, helplessness" (22). Plants are living in Chornobyl and, across generations, are growing with the environment to adapt to the land.

In these ordinary lives of the plants, the *Chernobyl Herbarium* is the returning to everyday mundane life in the durational continuation of disaster. Where, after enough time, the ordinary affect takes over again and normalises and neutralises the trauma into a new every day, always saturated with the remnants of that event but moving forward; a kind of cosmic microwave background where the electromagnetic radiation from the event of the Big Bang pervades across the universe. Tondeur's plants are ordinary things. Their radioactivity makes us want to see their lighted bodies as something extraordinary, but this is just their imprint. We can

look at the leaf structure of the gooseberry and recognize the plant, we can imagine the dry spiced smell of the geranium leaves. Radiation remains unseen. It is an uncanniness that settles over the plants and photograms as a trace of something else. Tondeur insists on the particulars of space, captioning all her images with the refrain "Exclusion Zone, Chernobyl, Ukraine." The images are haunted by the place because the place has an affective presence. Bell frames ghosts of place as a way of talking about "the specificity of the meaning of place" (1997, 215). The plants are social beings living their semantic structures, these dead specimens and their photograms are now one of the "multiple afterlives" of radiation where "the imprints portend survival, the afterglow of what gives itself to sight. They reflect the lived, and outlived, meaning" (Marder and Tondeur 2016, 38). We are haunted by their ordinary affect and uncanny afterlives that are embedded in the space of the Chornobyl Exclusion Zone. Similar to the iconic "red forests" of the Zone where fallen trees remain because there are no living organisms to break them down, the herbarium images show that the dead are present but have passed into a liminal state of unsettled stasis between being destroyed and being present. The plants lived semantic structures that voice their relationship to place continues after their death, haunting Tondeur's photograms.

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## A Strange and Familiar Present: Still Lives and the Fukushima Texture Pack

The things we see around us every day can fade into a forgotten familiarity, losing affective significance unless something startles us into noticing their presence or absence. A photograph of loved ones on a wall can become mundane until it falls and the glass shatters causing a realization of all the layered feelings of care and affection that are bound up within it despite its general invisibility in the background of our daily life. The Fukushima Texture Pack moves back and forth between the distinct moments of mundane forgetting and careful attention of everyday sights. To do this, artists Eva and Franco Mattes "photographed hundreds of indoor and outdoor surfaces inside the Zone, including floors, tatami, walls, dirt, grass, pavements, desks and closets. [They] turned each photo into a digital, seamless texture, that can be freely downloaded and used without copyright restrictions" (Mattes and Mattes 2016). The term 'texture' here is useful to describe the nature of these photographs as capturing the surface or visual face of something ranging from wallpaper to the clouds in the sky. These images are disconnected from contextualizing landscapes,

people, or objects, instead allowing us to look at them as tactile digital images. Some, such as a Suntory vending machine or a National AM/FM radio and tape player, are suggestive of place and time, however many of these texture photographs could be anywhere. The framing of these as a *texture pack* offers an experience of them as background that emphasises the everydayness to these images—you are able to enact this experience and, for free and without copyright restrictions, can download an image and use it as a digital background, print it on textiles, or as wallpaper. Without knowing what the origin of the images are, they enter easily into an everyday mundane digital and physical landscape.

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Figure 1. Fukushima Texture Pack, "FKS0239," Eva Mattes and Franco Mattes (2016).

The Fukushima Texture Pack was created as part of the larger collaborative art project titled Don't Follow the Wind, an exhibition installed inside the Fukushima Exclusion Zone that features twelve artists' (and art collectives') works that are largely inaccessible as long as the Zone remains closed to the public. Some artworks can be viewed partially or in certain ways from a distance, such as the Fukushima Texture Pack. However, other pieces remain unseeable; in the case of the Fukushima Texture Pack—in addition to the digital images—Eva Mattes and Franco Mattes installed

plexiglass panels over the surfaces where the images were taken which are not currently accessible to would-be audiences. The panels are transparent with an identification number etched on them reading, for example, "FKS0101" on what appears as a piece of rusted corrugated metal roofing (Mattes and Mattes 2016). These panels are all located within the Fukushima Exclusion Zone created after the Fukushima Daiichi Plant disaster in March 2011. Following a 9.0-magnitude earthquake that triggered a tsunami, the reactors at the plant were flooded and the backup generator was damaged; this caused the cooling systems to shut down leading to a build-up of heat and a meltdown and explosion of reactors one and three on March 12 and 13, 2011 (Britannica 2022). After this, the Japanese government evacuated people from a 1150-km2 area split into three categories, one that was to remain abandoned for the foreseeable future and two that were "remediated" and allowed for resettlement (Lyons et al. 2020, 127). Over 100,000 people were evacuated with the United Nations Scientific Committee on the Effects of Atomic Radiation (UNSCEAR) reporting: "No radiation related deaths or acute diseases have been observed among the workers and general public exposed to radiation from the accident" (International Atomic Energy Agency 2015, 132). With no claimed deaths, the Exclusionary Zone is seemingly denied the ghosts that Avery Gordon discusses who narrate trauma and give voice to stories of harm. The evacuated landscape of the Fukushima Exclusion Zone is unpeopled by the living and the dead.

Like the Chornobyl Exclusion Zone, images of the abandoned landscape now circulate online, though, unlike Chornobyl, the destruction from the proceeding natural disasters makes this Zone seem more destroyed than frozen in a living (but now past) time and the visuals do not share as much as they might first appear to the viewer after arrested attention. Because Chornobyl remains so steadfastly lived-in with its buildings and things in situ (though perhaps now more as props than accidental remains), the aesthetics of it as a post-apocalyptic space seem more like the Evangelical imagining of the rapture-moment where people are vanished from the world prior to the second coming of Christ leaving behind their worldly materials as they are snatched-up in media res, as it were.2 Fukushima, in contrast is often pictured as a wreckage; abandoned and destroyed homes, streets, cars, and fields are left in rubble and pieces. The images of the Fukushima Texture Pack "do not depict the disaster, they 'come' from the disaster, evoking it, and carrying a sense of incomprehension of the event" (Hirsch and Waite, eds. 2021, 64). Like the herbarium plants, the images do not replicate or repeat the violence of the disaster but turn to everyday pieces from the Zone that are saturated with the sense of place

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**<sup>2</sup>** For a popular media presentation of this eschatological conceptualization see LaHaye (1995).

and familiarity neither replacing nor replicating the totality of the event or the lives experienced therewithin. Looking at them we stand in relation to the ghosts of place, not predicated on or romanticising the actual dead, of

which UNSCEAR assures us there are none.

The textures are designed to circulate. The potential usage of the textures disconnected from their origin as irradiated surfaces inside the Fukushima Exclusion Zone is a line Eva Mattes and Franco Mattes are interested in tracing. The website with the textures available on it requests users to reach out: "We are curious to know what the textures are used for. Please do share your results by emailing us" (Mattes and Mattes 2016). D. M. Bothwell and P. A. Stewart, in the chapter "Knowledge Exchange and Knowing: The Self, Art Practice and the Digital," connect the Fukushima Texture Pack, drawing here on Anaïs Nin's work, to a practice of defamiliarization, wherein art has the capacity "to take the everyday and make it strange" (Bothwell and Stewart 2020, 287). This defamiliarisation is akin to the emotional shifting that Stewart described as the moment of "still life" when the background everyday normalcy is interrupted by a stilled focus that changes something about how we perceive the space. Like Zabuzhko's still life, the recognizable things around us become objects of focused attention; Juan Sànchez Cotán's Still Life with Quince, Cabbage, Melon, and Cucumber (1602) focuses the viewers' attention on the verdant cabbage and quince suspended from strings above a table where a cut melon and cucumber sit facing outward towards us as if waiting to be picked up and consumed. In the Fukushima Texture Pack, the still life is the frozen attention on the familiar black dots on the white ceiling tile or the similar

tile with a mounted florescent light.

Figure 2. Fukushima Texture Pack, "FKS 0115" and "FKS 0116," Eva Mattes and Franco Mattes (2016)

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Within the space of the *Fukushima Texture Pack*, the defamiliarisation is reversed—the space is unfamiliar as an exclusion zone that forced the severing of everyday ordinary affective relationships with these familiar things. The still life takes the everyday and makes it strange; here the images' mundane textures are known to be contaminated surfaces, but this can slip into the background as they become familiar and circulate beyond their original context. For Stewart, the hyper focus on the still life object is what renders it unfamiliar, but here this is reversed and it is the background space that instead renders the stilled object unfamiliar and uncanny when it is brought forward into the viewers' attention. Here, the familiar is itself haunted by the persistence of contamination and, simultaneously, the contamination is haunted by the persistence of familiar space that is meaningful within the ordinary affective lives that extend beyond the Zone and the durational experience of fallout. The Mattes's work plays with our sense of familiarity; I look up from writing this article and see my own office ceiling with its own white and black speckled ceiling tiles. The everydayness of this texture reminds viewers that a nuclear event causing radioactive contamination could occur anywhere, though the experience of disaster is unequally valued as are the lives effected by it (Nixon 2011, 65).

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Figure 3. Photo of the Author's Office Ceiling (2022)

Bothwell and Stewart push the idea of defamiliarisation forward into a discussion of Mark Fisher's work on Derrida's concept of *hauntology* (a portmanteau of haunting and ontology) to discuss how the present is

always configured through what is not, either as a not yet or a no longer (Fisher 2012, 18–19). The liminality of the present framed through what is not yet there and what is no longer there becomes a fertile ground for ghosts who like to inhabit these betwixt and between spaces (Davies 2009). The textures stand in relationship with us and invite our own affective attention to draw them towards ourselves for our own uses. Their ubiguity and open-access status is contrasted with the locational specificity and immobility of the plexiglass plates in the Exclusion Zone. The origins of these images are rooted in the space of Fukushima and they take on an uncanniness as their ordinariness creates a liminal space that destabilizes the images and asks us to freeze our gaze on the detailed still life of a florescent light. Freud popularized this notion of the uncanny, which in German roots us in the familiarity of home with the term unheimlich, literally not-home-like, though translated as 'uncanny.' Freud defined this feeling as belonging to "that class of the species of the frightening that goes back to what was once well known and had long been familiar" (Freud 2003, 124). This liminal inbetween space flips our expectations of hominess, our knowledge of what these images are (where they are at home and familiar) within the Exclusion Zone—a place seemingly set outside of ordinary affect and everyday things—the uncanniness and defamiliarisation occurs when we recognise in them our own familiarity and our own invitation to reuse these images as open-source textures. The texture pack sits in an uncanny twilight space where familiar things take on new shadows and the edges become blurred. Ghosts like to move through these liminal spaces and crepuscular times. Here, these are not the ghosts of the dead, but the ghosts of an abandoned everyday in an evacuated zone, this haunting reasserts an ordinary affect over the AM/FM radio and the ceiling tiles that is both at once home-like and not-homelike (Mitchell and Petty 2020, 401–409). In turn, our ordinary affect is haunted by the place of origin, by our imagination of the erupting event at the Fukushima Daiichi Plant that seemingly ended the possibility for an ordinary mundane in the Zone and for the people who live surrounded by these everyday textures.

While its nature is changing due to the levels of radiation in the Zone, Don't Follow the Wind was conceptualised as an exhibition that no one could visit; it was in the present, but framed through what was 'not yet' and 'no longer' and, as such, simultaneously not yet and no longer at safe radiation levels for people to visit or return home. As of 2022, after "[m]ore than a decade has passed since the earthquake, and the Don't Follow the Wind venue is now open to the public, as the evacuation order has been lifted in August 2022" (Don't Follow the Wind 2022). As of right

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now, Meiro Koizumi's *Home* (2015) will be "re-created and expanded on the site" now open to the public for sixteen days, with the note that "this venue will not be included when another venues [sic] open in the future. There is no known time when the other works inside the zone will be accessible" and all identifying maps, locations, and documents are not to be circulated (Don't Follow the Wind 2022). In contrast to this, Eva Mattes and Franco Mattes's works invite circulation and exist simultaneously inside and outside the Zone. We look at the textures and see our walls, streets, roofs, skies, and ceilings. When we look for too long, they morph into something defamiliarised, holding the still life moment and allowing the mundane to become the subject of focused attention that extracts it from the everyday and makes it into something affectively full.

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#### Home: A Ray of Hope

Heimlich, home-like, is not without its own ambiguities; it is a vast space of ordinary affect that can be a comfort and a containment. Ai Weiwei's A Ray of Hope (2015) is a light installation in a single house inside the Zone that has solar power lights, which turn on for a total of five hours every day, once in the morning and once in the evening "when the residents who are no longer present—would normally be home" (Hirsch and Waite, eds. 2021, 256). Like a lighthouse, the light beckons home those who lived here, though no one can see it, it signals a way back, hoping and "waiting to be rejoined in the future with a chorus of accompanying lights and those who will return" (256). The house becomes the only source of emitted light in the abandoned houses of Fukushima appearing as a warm yellow glow coming from the windows. A Ray of Hope projects forward and calls out to those who left; the hope of return is surrounded by the destruction of the houses and the darkness that surrounds it at night. In his review of the Don't Follow the Wind: Non-Visitors Center, the satellite exhibition at the Watari Museum of Contemporary Art in Tokyo inn September 2015, Kenichi Kondo sees A Ray of Hope as having "a ghostly resonance with the outspoken artist-activist's [Ai Weiwei's] experience of being grounded in China for four years, after the government confiscated his passport in 2011" (2016, 154). Ai Weiwei makes this connection as well in his second installation, Family Album, where he had personal photographs documenting aspects of his life placed in two other houses in rooms where other people once lived. Weiwei, living under house arrest and unable to travel to Fukushima, authored the installation from China.

The photographs include a range of material including images from the investigation of the 2008 Sichuan earthquake, images of him being followed and surveilled by the police from 2011 to 2012, images from his surgery following police attacks that injured his head, and family photos from 2011 to 2013 (Weiwei 2015).

Ai Weiwei is both present and absent from the houses, which appear both abandoned and active as homes. Unlike the Chernobyl Herbarium or the Fukushima Texture Pack, A Ray of Hope and Family Album are not focused on taking and circulating fragments of an irradiated land; instead, the insistence on place is emplaced on the land of the Zone itself but rooted to the intimacies of everyday home life therewithin. Family Album uses images of people, specifically by referencing and inserting Ai Weiwei's life into the house, by using his own photographs and placing them next to those left by the families as they evacuated their homes. Weiwei's selection of images that document state violence, misinformation, and disaster also suggest an alternative view of the disaster itself. This is not the aesthetics of ruin porn or post-apocalyptic abandonment; this is the loss of home and an exploration of the interactions of self and state that co-configure the lived experiences of mass destruction. Jacob A. C. Remes and Andy Horowitz argue in Critical Disaster Studies for a conceptualisation of disasters not as isolated events but as political and durational experiences that are then packaged, interpreted, and narrated as "interpretive fictions" (Remes and Horowitz 2021, 2). This fiction is not a denial of the disaster, but rather a recognition of the discursive productions around them. In a 2011 interview, Ryuta Ushiro from the Chim<sup>†</sup>Pom collective stated that once the Zone was closed "what you saw on television were images [of the plant] shot from outside the 30-kilometer zone but digitally made more clear [sic], and the press only carried comments from the government. But it was really unclear what was going on inside" (PBS, no date). Ai Weiwei's work connecting and documenting the 2008 Sichuan earthquake was rooted in the missing and skewed view presented in the Chinese media; he described the impacts of this on him by stating, "If you cut into a tree and look at its rings, you can see certain years have left more of a mark in the wood. That's what the Sichuan earthquake did to me" (Weiwei 2018). Connecting these two earthquakes in his art, Weiwei and Chim<sup>†</sup>Pom ask us to confront the roles of the media and the government in circulating and silencing the interpretive fictions that narrate and represent the disasters. Here, there is an insistence on the duration of the disasters as continued and inhabited ongoing traumas.

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The peopling of the house is both an insistence on the everyday lives of the families at home, but also the lives surrounding the Zone that configure, interpret, document, obscure, and become informed by the disaster. The houses may illuminate the darkness directing people home, but they also ask us to place these in a political and social world. Ryuta Ushiro argues that art is not powerless in the face of disaster and overwhelming reality, it can "walk parallel paths" with the press (PBS, no date). Weiwei's work has addressed the censorship and state control of media, and his work posits a more ambiguous relationship. Weiwei's houses insist that as "news of Fukushima becomes more sparse [sic], yet while the ongoing crisis continues, this light [in A Ray of Hope] also activates a critical imaginary. We might not hear about the precise state of the zone or its contamination levels, but we do know that the daily ritual of the beacon continues to illuminate the darkened zone" (Hirsch and Waite, eds. 2021 256). Weiwei's houses insist on Fukushima being another deep indented time in the tree rings, with durational and historical connections that shape how we understand what a disaster is and how is reorders lives.

Ghosts reorder the temporality of life; they challenge a teleological framework of mortality, and they return, repeat, reanimate, and renew their lives often within familiar places and things. The house, as a primary site of haunting becomes a space where ghosts can "become part of the temporal continuum, of the accumulation that makes the house what it is" (Lipman 2014, 74). Weiwei's beacon and photographs reach back to lives lived and forward to lives to be lived inside the houses in the Zone. The houses mourn, hope, illuminate, and document disasters. Carol Lipman, in Co-Habiting with Ghosts, argues, "the haunted home is a bounded place with a particular presence which is made up of a complex mixture of spatial and temporal elements; a rooted, animated depth" (193). It contains within it a heterotopia of times, people, trajectories, affective experiences, and desires (195). The populating of the homes with people binds them to the Zone and insists upon the ordinary lives that were lived everyday therewithin. Once there, the ghosts are inside their home, inside the everyday affective lives lost in the evacuation. The haunted home is uncanny, it defamiliarises that which is often most familiar. It is not taking the destroyed and abandoned homes as post-apocalyptic, but rather as 'no longer' and 'not yet' inhabited by non-ghostly lives. The disaster is durational, but the memory of a lived-in past and a hope for returning in the future allows the houses to sit in a liminal space populated with people who were and will be there.

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#### **Ordinary Hauntings and Nuclear Ghosts**

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Ryuta Ushiro described nuclear destruction connecting Fukushima to the memories of Hiroshima and Nagasaki stating in an interview, "the ghost towns we'd seen in anime and sci-fi suddenly became a reality" (Trezzi 2022). Ghost towns are abandoned, homes left, industry gone, and haunted by the everyday lives that were lived there. Even when empty, ghost towns remain peopled. Ushiro's ghost towns are not the ruin porn or apocalyptic imaginary of a verdant pastoral landscape where artists and documentarians can picture a destroyed or abandoned space free from the people, relationships, lives, and affects of the missing. Adrianna Petryna, in Life Exposed: Biological Citizenship after Chernobyl, argues, "[i]t is ironic that we have better knowledge about recovering ecosystems of the Chernobyl dead zone—where a herd of rare and ancient Przewalski's horses now run wild—than we do about recovering people and human conditions on the ground" (2017, xxvii). Her book focuses on the human lives impacted by radiation, recording "people on the ground are refusing to be stratified out of existence. They refuse to disappear" (xxviii). The "decidedly nonpeopled approach" to nuclear disaster and to mass destruction more broadly, becomes an ethical issue of how we stand in relationship with the dead and with disaster (xx). The framework of unknowability and incomprehensibility can become justifications for avoidance. Remes and Horowitz caution readers: "by defining certain experiences as exceptional and others as normal, conventional thinking about disaster has too often set limits on our social imaginations" (2021 8). The artworks I consider here seek to think about disaster without replicating the violence of nuclear radiation. Rather than placing the aftermath of the nuclear meltdowns as exceptional, these artists draw us into a normal aesthetic where our sense of loss is rooted in the relationship to everyday life and ordinary affect—living room lights, windows, local plants, and ceiling tiles. The living refuse to disappear from their homes even as they are no longer and not yet living there.

Officially, there are few dead to populate these Zones as ghosts; Petryna articulates the politics and invented fictions in the official statistics from Chornobyl and Fukushima that minimize the dead and dying by factoring away long-term biological and genetic impacts of radiation. However, we do not need the dead to encounter ghosts. Ghost towns, as Ushiro names, are often associated with abandonment rather than apocalypse. Popularized as a term in the early 1900s, it was associated with the American West (Procházka 2007, 67). Mining towns, oil towns, mill towns, car manufacturing, industries that draw people to a place can collapse

leading to the exodus for those who can and choose to leave. The haunting is rooted in the lost ordinary affective life, here tied to the memories of economic prosperity, industry, and community (Stern 2019, 213–247). Unlike the abandoned ghost towns of industrial settlements, the abandonment of Chornobyl and Fukushima was an evacuation and inextricably tied to the threat of radiation and death; nevertheless, there is a shared haunting of a space in the remnants of a still life of a now-gone everyday mundane life. The nuclear ghosts in the Exclusion Zones are parts of lives, embedded and traced in the clippings from plants, linoleum tiles, and the five hours of illuminated home. The power of ordinary affect reaches across these works as an unheimlich force that asks us to mourn and stand in relationship with the extracted moments that are defamiliarised even as we look at them and know them. The uncanniness of being asked to look at a still life haunts us with the lives that extend beyond that singular fragmentary moment. Regardless of whether they are dead or alive, the ordinary affect of those who lived in the Zones haunts the space and saturates it with ghosts just as the contamination of radiation haunts that same ordinary affective life as an uncanniness in still life. These artworks draw us into relationship with the ghosts of those who no longer and not yet lived with everyday plant life, still life, and home life.

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#### Acknowledgements

I would like to thank my editors, anonymous reviewers, and colleagues who have read and commented on this work. Your careful attention and consideration of this article have been invaluable. I would also like to thank Jenny Stümer for organizing this project and her guidance throughout.

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