



NUCLEAR THEORY DEGREE ZERO, WITH TWO CHEERS FOR DERRIDA

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The release of atomic power has changed everything except our way of thinking ...

Albert Einstein (Johnson xi)

Coming to terms with the nuclear android

This is written on the verge. We have been set up by the holy grail of science, by the offer of a solution to diminishing resources, a solution to global war – the American Manhattan Project writ large as a full-stop on modernity (Fox). But it wasn't a full-stop, and it wasn't the solution to diminishing resources. It is the deadly promise of total death – fast and slow and slower. It threatens to be all encompassing. We make our journeys towards awareness of the nuclear in so many different ways, but we arrive at the same dead ends. Hiroshima and Nagasaki fallout on one side, while the other side melts down into Chernobyl and Fukushima. As Jean-Luc Nancy suggests: “Nuclear catastrophe – all differences military or civilian kept in mind – remains the one potentially irremediable catastrophe, whose effects spread through generations, through the layers of the earth” (3). Recognition of the anthropocene threatens to mulch nuclear catastrophe amid other layers of anthropogenic damage, notably plastics. As the ecology of floods, tsunamis and earthquakes around *Fukushima* also reveals, the nuclear is caught up in the risks of global warming: “natural catastrophes are no longer separable from their technological, economic, and political implications or repercussions” (4). We are caught in a symbiotic intertwining in which “nature” can no longer be imagined as a backdrop, but has become a dark ecology prefigured

EDITORIAL INTRODUCTION

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by the nuclear, and suffused with it. Scientists talk of the nuclear industry reaching from the cradle to the grave: the mining to the enriching to its (half-)life in a reactor to weapons-grade plutonium. It is not a straightforward journey – there are diversions and different routes – but semantically and biochemically, militarily and politically, they link, and in terms of ultimate outcomes, they break up the links of DNA, and the materials that constitute the world.

Nuclear representation is torn between the global society of the nuclear spectacle and the micro-threads of lived experience, between the heroic if morally poisoned scientists and the damaged Plutonium knights of the nuclear

workforce. There is scarcely a viable theoretical framework capable of mediating the sciences of the nuclear and implications for the humanities. Literary forms struggle to mediate hybrid forms between the extremes of what is nevertheless an industrial project, an ecological miasma and a living nightmare.

Poetry has always been one of the immediate, more visceral responses to nuclear catastrophe – part of the attempt to register how catastrophe both shows and annihilates human agency. E.P. Thompson’s poem “The Place Called Choice” (1950), to take just one example, attempts to absorb the shock of the atomic and mediate the scales of human agency and resistance (*Collected Poems*). Theory, too, can only absorb and variously shadow the shock of nuclear immediacy, registering its impact across the globe and into the future. The theoretical implications quickly proliferate into the nuclear nightmare, the nuclear sublime, the nuclear uncanny (Masco), and the nuclear hyperobject (Carpenter). Our collection features work written from different activists and theorists, alongside poetry and work by poets. Poetry offers ways of thinking through and representing aspects of the many-sided challenge of the nuclear. Poetry is a textual Geiger counter registering the spread of toxicity and contamination. Exposed, it responds while it can, and outside the immediate fallout, poetry lets us know our vulnerability to the nuclear, and our own culpability in attempting to humanise or aestheticise it to appease guilts and doubts.

We sought Russian and Japanese writing – poets, thinkers and theorists – in part to register the impact of the nuclear on world language, but we have been unable, in time, to secure poetry in languages immediately out of *those* catastrophe zones. Books such as *Chernobyl Prayer* (Alexievich) and *The Chernobyl Herbarium* (Marder) nevertheless offer models for confronting the nuclear. There are anthologies giving voice to Hiroshima and Nagasaki (Selden), along with an emerging body of writings out of Fukushima. Our collection offers glimpses, too, of bodies of work that register nuclear miasma, from British atomic weapon testing on “outback Australia,” to US nuclear weapons situated in Holy Loch

and Greenham Common. Nuclear production breaks up all the received traditions of the agricultural and industrial revolutions. Everything solid melts into spent rods and radioactive slag-heaps. And yet this meltdown of received paradigms of life and theoretical praxis has scarcely been recognised.

We encounter the nuclear in so many ways: radium on old clock-faces (Johnson), nuclear medicine that might save us, catching the residues from processing ponds. And “the nuclear” is scarcely even contained by the definite article: it encompasses so many incommensurable but intertwined problems. The nuclear industry is evidently also a politically devised and imposed project, a binding regime of irrational politics and economics central to the military-industrial complex. Is “the nuclear,” then, a discourse, a scientific paradigm, a structural regime, a rhizomatic network of biopower, or all of these? We might call this the ideology of the nuclear if such a description didn’t risk implying that the nuclear wasn’t itself a baseline, one of the baselines of modern theory and practice. Characterisations of “the nuclear” invariably emphasise one aspect over another: the threat of nuclear war over the consequences of uranium mining and plutonium “enrichment” (“impoverishment” more like!); weapons systems over the nuclear workforce; science and technology over the imaginative traumas of the nuclear; waste over the practical use of nuclear material in nuclear medicine; and so on. The risk of idealising, romancing or reifying some aspect of “the nuclear” as a paradigm, tentacular object or ideology – it is all three – suggests the need to see the nuclear as a many-headed hydra, a nuclear leviathan or behemoth, perhaps even as a root system whose extended mycelium finds its teleological explosion of spores in the mushroom cloud.

Even if the nuclear remains resistant to conventional forms of representation, being too plural, too invasive, too torn between its dirty reality and its catastrophic potential, the disasters of human nuclear agency will long outlast the hubris of the humans who designed and built our nuclear fate. The very metaphors of the nuclear have gone critical, reaching critical

mass in the cores of our thinking. Nuclear theory and practice leach into a radioactive network of many nuclear worlds that condition and radiate what cannot safely be contained by any human paradigm or imagination. What are the right terms for a critical description of the nuclear regime: the nuclear biopower matrix, the nuclear complex, the nuclear stain? We lack agreed metaphors with which to build meaningful resistances. Having explored the risks of such umbrella terms – the sick joke of the phrase “nuclear umbrella” contaminates even the metaphoricality of umbrellas – we propose thinking of “the nuclear” as the *nuclear android*. The nuclear, and its anthropogenic radiation through human agencies, breaks up the history of human thinking into new forms of theoretical inhumanity.

The verge of this writing is also a brink, a brink afflicted by forms of brinkmanship that are markedly gendered, directed and controlled not by “Man” but by specific men – the living avatars of Kubrick’s Dr Strangelove. From the earliest posturing of nuclear science and its military leaders, on through the Cold War and the Cuban crisis, right up to the absurdly dangerous brinkmanship of Kim Jong-un vs. Donald Trump, the agents of nuclear brinkmanship are men of hubris. Indira Gandhi authorised the development of nuclear weapons in India in 1967, partly in response to nuclear testing by China. And Margaret Thatcher was no nuclear dove. But the power of the nuclear – its scientists, its politicians and its military leaders – has been dominated by a relatively small number of men, imposing their conceptions of energetic auto-destruction on the world. Men have also dominated anti-nuclear politics and its critical representations, but anti-nuclear resistance movements have a different history of gender and protest. The women of the Greenham Common protest camps, for example, marked an important breach with the prevailing logics of power, protest and representation. The feminist critique of what Baden Offord calls “the nuclear algorithm” is, however, surprisingly absent from the readily accessible levels of the archives of nuclear criticism, though more evident in the archives of

nuclear art and song. To explore another key theoretical inflection, what would it mean to decolonise the nuclear regime given the ways in which the nuclear has been inflicted on colonies, Indigenous peoples and peripheries? It is scarcely imaginable that the nuclear can ever be decolonised, so deep is its imprint. The environmental humanities are beginning to change these historical and theoretical paradigms, but it remains a challenge to bring together threads of resistance from frontline activists to the ecologists of nuclear theory degree zero.

When the possibility of an issue of *Angelaki* addressed to the nuclear was first discussed, there were some suggestions that the nuclear was an anachronism, a throwback to the culture of the 1970s and 1980s, but the crises of the nuclear regime have persisted and deepened. **The moment of Derridean nuclear criticism had suffered its own half-life into relative critical indifference, seemingly to be replaced by extinction criticism. The nuclear regime is not, however, some return of the repressed: it was never repressed, just allowed to disseminate and radiate beneath the radar of public scrutiny and protest.** The world’s military stockpiles have not been decommissioned. On the contrary, they are still being developed, and not just in the most conspicuously advertised contexts such as North Korea. The story of Stanislav Petrov, who in 1983 saved the world from nuclear war by overruling the warning system, reveals that we hang by a thread on human judgements all too capable of making mistakes. Nuclear power has even re-emerged as an ecocidal solution to global warming. The problem of nuclear waste has never been solved and is storing up problems so far into the future as to have created a need for new forms of “memory stewardship,” ways of warning future survivors not to dig up buried nuclear waste in years to come, when twenty-first-century communication has ceased to be intelligible (Stang). The unthinkable long-term traces of the nuclear android are not going to wither away this side of human extinction. Far from being anachronistic, the crisis of the nuclear android defies the chronologies of human

understanding. We will not have finished with the Cold War until we have finished with nuclear weapons, not just the hardware, but also the force of nuclear dogmatism and the nightmares of nuclear terror. What remains anachronistic is the curiously pervasive reality of living in denial as regards the nuclear biopower regime and its post-historical stains. Humanity lives on as though the nightmares of the nuclear and of global warming might melt away, but they are here to stay.

Denial of the nuclear prefigures and parallels climate change denial. If the world remains on the brink of nuclear wars that have ghosted human history since 1945, the nuclear android also shapes and defines the modernity known as the anthropocene. The residues of nuclear weapons will remain a permanent stain on the geological record of the earth. Despite the still precarious and permanent scars left by the evidently accident-prone nuclear industry, nuclear power has its supporters, and, moreover, those who see nuclear fusion as some promised land. In the 1960s, Project Gassbuggy even saw downhole nuclear detonations to release natural gas trapped in shale (Anon.). Although scarcely reported, flowback water generated by twenty-first-century fracking techniques is a form of radioactive waste. Fracking is a dysfunctional form of nuclear waste production, with all this implies for pollution of the water table and cancer. The unspoken problems of fracking compound the problems of nuclear mining, production and waste: “nuclear” energy is never clean.

Protests to stop uranium mining around Wiluna in Western Australia, which has since been given the go-ahead, talked of the sacredness of country, the belonging to country, and the consequences of disturbing country. We find some on the green left embracing nuclear as the only option to reduce carbon emissions. Monbiot, Lovelock. A lack of imagination. The false pragmatism of the hubristic scientist. A lack of recognition, too, that the slowing of energy usage, the shifting to technologies of creativity, working with the sun and the land itself, offer other outcomes, other ways of avoiding the heating. Rather than making mini-suns

in the laboratories and mad science projects of nuclear physics, the more pressing concerns are those of wind, solar and geothermal energy. At the time of writing, the unit price of UK windpower has fallen below UK nuclear power for the first time, and without reckoning with the incalculable costs of cleaning up a nuclear industry that cannot be cleaned up.

Each of us is on our own journey to the threats of “massive military force,” of hydrogen bombs tested ten kilometres below the surface – 6.3 on the Richter scale. So we measure, we calibrate, we assess the risk. For those of us who worked in labs in our teenage years and calibrated the X-ray spectrograph, who handled samples of enriched uranium, who ended up with damaged thyroids such that a dose of iodine to absorb radiation would mean thyrotoxicosis, it has a strange bodily inflection. Or catching the Indian Pacific train across Australia again and again, repeatedly coming within forty kilometres of the Maralinga test zone, where the British tested their nuclear devices with the Australian government’s support. The consequences for the traditional owners and custodians are now eternal. A line of connection of tens of thousands of years is interrupted with lines of disconnection and health trauma for a rewritten future. It is possible to imagine a very different history in which nuclear science was devoted solely to medical purposes. And yet, for all the efforts of the nuclear android, the people whose land it is exist, and will always exist, beyond the destructions of radiation. Each to our own journeys, and to our collective journeys.

A far-leftism of theory and practice arises out of confrontation with such overwhelming inequality as the nuclear brings, while purporting a bounty, a cornucopia, an “umbrella” of protection, deterrent, largesse and enrichment. Such contradiction doesn’t even warrant being called a paradox, as its core is unstable, and accidents and conflict and mass destruction inevitable. We eat food grown alongside reactors – France has defined its post-war independence and cultural and spatial self-affirmations out of the nuclear. Its wastes are everywhere. Everywhere in France is touched. Organic grain

grown with a touch of tritium, decaying quickly. In the 1970s, the famous *beurre de la Hague* had to be renamed *beurre de Val de Saire* because people refused to cook with it. Other residues last and last. It is remarkable the extent to which the French wine industry shares rivers and water-tables with nuclear power stations. Low levels of radioactive waste have leaked into the very groundwaters of champagne wine. An accident at the Tricastin Nuclear Plant in 2008 threatened the reputation of the Tricastin wine brand: the solution found was to rename the wine region to disguise this dangerous proximity from consumers. One of the paradoxes of the French nuclear industry is the invisible presence of the nuclear industry, not just in food and wine but in French theory itself. There have been Foucauldian analyses of nuclear power regimes (Babeau and Fillol), but discussion of the nuclear android is marginal rather than prominent in the archives of French theory, with the notable exception of Jacques Derrida. When such nuclear problems do figure in critical theory, they appear marginal rather than critical. Marxist theory has been no less clumsy, slow to recognise the challenge of the nuclear to traditional models of political theory (Thompson, “Notes”; Williams). Nuclear questions both inform and undermine theoretical enquiry: the theoretical lacunae are multiple and yet they languish as if there was nothing new under the nuclear sun. Actually-existing critical theory remains a marginal resource for critical resistance to the nuclear android.

Along with the sceptical suggestion that “the nuclear” might be an anachronism, not just for culture, especially popular culture, but for “peace studies” and for critical research, there are various blocks on recognition of the nuclear android’s grip on life and argument. This grip has not been figured in the work of critical theory with the persistence that its significance demands. The theoretical humanities rarely know enough science to engage with nuclear science and technology. The nuclear android nevertheless enforces recognition that thinking cannot survive by philosophy or theory alone. Amid the history of “nuclear

criticism,” Jacques Derrida’s seminal essay demands reconsideration, echoing Tom Cohen’s call to rethink Derrida’s essay against the horizons of climate change (Cohen). For all Derrida’s seminal qualities, it became clear to the editors of this collection that we needed to contest Derrida’s essay.

2 first cheer for derrida: the ageing of the nuclear android (dm)

Derrida’s essay weaves a provocative texture of metaphors and rhetorics, both in its structure and in its argumentation. The choice of metaphors is critical, but Derrida’s essay leans too heavily on the fiction and fable of the threat of nuclear war and the arms race, along with the speed of decisions engaged by what E.P. Thompson diagnoses as the “hair-trigger” of Exterminism (Thompson). Now that nuclear culture is more evidently differential, more nuanced in relation to the nuclear android’s many forms, it is more evident that **Derrida’s essay deflects nuclear criticism not just away from weapons testing, accidents and waste, but from non-military uses and from pressing scientific, technological, military and political questions. The acceleration of the argument skips beyond the whole mycelium of uranium extraction, enrichment, nuclear testing, weapons delivery systems, power stations and the rest. Nor does Derrida thematise the temporality of nuclear physics and radioactivity, but finds ways to return the nuclear android to questions of speed and time, questions then read back into the metaphysics of temporality from Heidegger to Aristotle.**

Derrida asks whether the nuclear is something “new,” an unprecedented increase in “speed” or “rather the brutal acceleration of a movement that has always already been at work?” (Derrida 20–21). In Derrida’s modulation, moreover: “Of all the dimensions of such an ‘age’ we may always say one thing: it is neither the first time nor the last” (21). Derrida’s argument shifts the terms of discussion away to the construction of the age according to the fable of the threat of nuclear war:

“Reality,’ let’s say the encompassing institution of the nuclear age, is constructed by the fable, on the basis of an event that has never happened [...]” (23). The temptation to thematise the nuclear age is strong, but such formulations tend to confuse the specificities of nuclear problems within the parabola of a zeitgeist. With everything else in play across the post-1945 entrenchment of global capitalism, the nuclear is a significant and potentially critical factor, but not the single defining parameter.

As a dysfunctional military-industrial complex, the nuclear android has been resisted and fought. It can be defeated, though it may never be cleaned up. Within the emergence of the nuclear android, moreover, there are newish moments of science, pollution, military psychology and so on. It becomes a false or empty totalisation to construe an “age” out of the nuclear, and the question whether it is unprecedented conflates the question of what is nevertheless qualitatively and quantifiably different. Hiroshima marks something different, as do the Nevada tests, as do Chernobyl and Fukushima. Asking whether there is anything new under the nuclear sun that defines the nuclear age obscures such differences, as does insisting that some aspect of the nuclear is the radical break. Novelty is not the substantive issue, but the changed conditions of nuclear ecology are different, already disastrous and with the ageing potential to become permanently disastrous.

Derrida’s talk of “the age” puts pressure on that which is unthought in the temporality and technology of the ontological predicament characterised as “nuclear.” The nuclear android imposes fundamental ontological questions, but rather than contesting our nuclear differences the horizon of “the” nuclear age allows some “unprecedented” moment or substance – plutonium, perhaps, or Trinitite – to be hypostatized, and then questioned as a concept. The alternative model of brutal acceleration follows from a false binary. The Manhattan Project evidently accelerated the creation of weapons of mass destruction, and with it, the military-industrial complex. It’s the rhetorical binary, however, that deflects thinking away

from the kind of concrete, Brechtian questions of knowledge, science and politics figured in Brecht’s play *Galileo Galilei*. Newish but not fundamentally unprecedented risks, toxicities and threats are bound up with the military-industrial complex of the nuclear android, and not just as theoretical fictions, but more as a cyber-behemoth, an anthropogenic technological catastrophe. Brutal acceleration is also a slow-moving disaster, and the unfolding differential reality is idealised if understood either as “the” ontological question of our time or as repetition or intensification. The development of nuclear physics, military technology, uranium extraction and enrichment scarcely happen in a flash: they were socially and politically organised across uneven and conflictual processes. We can see here an important shape of nuclear argument, one that is also framed by the Cold War. The shock of the nuclear android prompts temptations to deflect argument away from a politics of anti-nuclear solidarity onto the terrain of Western metaphysics from Heidegger to Aristotle. The diversion of questions of science, power and political agency into the politics of the question can then be shown to be rooted in some unthought framing of the question of technology, of the political as such.

Derrida also dramatises the incompetence of nuclear criticism, not quite to bring the practice of the theoretical humanities into question but to open up our status as “non-experts,” critics “who know at least that they are not military professionals, are not professionals of strategy, diplomacy, or nuclear techno-science” (Derrida 22). There are some important democratic deficits in the relevance of expertise sustaining the nuclear android. But Socratic modesty – knowing that you know nothing – has its own, sophisticated competence, “We are specialists in discourse and in texts, all sorts of texts” (ibid.). The “we” of Derrida’s rhetoric is a problem, as is the slippage between discourse and text:

inasmuch as we are representatives of humanity and of the incompetent humanities which have to think through as rigorously as

possible the problem of competence, given that the stakes of the nuclear question are those of humanity, of the humanities. (Ibid.)

This is special pleading, a ruse to reinscribe the professional competence of scholars in the humanities to comment on questions that go beyond their scientific competence, to mediate on behalf of humanity. Who is this “we” that imagines being representative of humanity so quickly conflated with the humanities? But amid “all sorts of texts,” one sort of text not much opened by such specialists are textbooks of nuclear physics. The nuclear fable somehow saves the relevance of literature for nuclear annihilation, and thereby preserves the Olympian competence of the incompetent humanities to comment on the nuclear. Derrida even suggests that: “the phenomenon is fabulously textual also to the extent that, for the moment, a nuclear war has not taken place: one can only talk and write about it” (23).

A further line of political deflection is the accelerationist strategy. There are quasi-leftist accelerationists (Mackay and Avanessian). We should take seriously the proposition that the only way to save the planet is to accelerate the pace of technological innovation. On one view, the only way to save the planet from global warming is by developing nuclear fusion technology. This points down the pathway of the Hadron collider and big science. But there is another acceleration that would decommission all forms of nuclear technology, and rather than imitating the sun, seek renewable forms of symbiosis with solar energy. A global diversion of military and industrial resources into renewable and sustainable energy forms would constitute a technological acceleration coupled with a radical deceleration in fossil fuel consumption, perhaps even putting the brakes on the fallacy of economic growth. What quickly emerges is that there are choices to be made across contested terrains. The forms of acceleration are political choices, choices of great urgency, but to thematise “acceleration” as such provides scant critical purchase on different forms of acceleration. What is needed are nuanced mediations of the science and

technology currently available, along with global democratic decision making on those technologies we choose to accelerate or slow down.

Another version of the “accelerationist” argument captures some of the ideological workings of the term. In Marxist circles, an “accelerationist” is someone who thinks that the collapse of capitalism will be hastened by allowing reactionary forces to speed up capitalism’s self-destruction. There are occasions when such an argument has validity: nothing about the form of the argument makes it inherently or structurally wrong. There are revolutionary moments when allowing capitalism to collapse in order to rebuild a socialist society is a better path than propping up a failing capitalist regime. The judgement is political rather than philosophical. In most contexts, however, the accelerationist argument, especially as a political principle, is deeply dangerous. It would be better, for example, to preserve a failing US capitalist regime while building social forces to take it over, than to allow the nuclear weapons of the United States to fall into the hands of a suicidal military rearguard or some counter-revolutionary terrorist organisation. Preserving the possibility of human life might involve propping up collapsing capitalist institutions, not least the nuclear safety inspectorate, rather than allowing humanity to be swallowed up by some death spiral of presidential dictators in fear of being toppled. These are critical judgements that could arise at any moment, with real risks that poor judgements will hasten a nuclear confrontation that leads to mutually assured annihilation. The formal shape of an accelerationist argument needs to be understood strategically and politically if it is to address nuclear questions.

The accelerationist view that the deepening of capitalism could hasten its self-destructive tendencies and lead to its collapse is not inherently suicidal, but consideration of what the collapse of capitalism might mean for the global stock of nuclear weapons and nuclear power stations indicates dangers. Amid the collapse of capitalism, securing the safety of nuclear resources is a fundamental priority, and preparing a

decelerationist strategy is an essential political position for any radical formation serious about nuclear safety. Against the horizon of nuclear crisis, we rely on workers to know how to manage and decommission nuclear weapons, silos and power stations. This requires “good” science and ongoing struggles to control the decision making around weapons and energy systems. **Concrete consideration of what happens to ageing nuclear systems in an imploding political system has been tested in the fall of the Soviet Union.** Imagine the retrenchment of reactionary forces around nuclear installations threatening suicidal political terrorism on a global scale. **The risks of a collapsing capitalist system taking the world down with it are clear.** Chernobyl and Fukushima, moreover, stand as metonyms of the risks involved in systems that were apparently functional and yet spiralled out of control even in what might be called peacetime. The risks of the US or the Chinese nuclear androids imploding involve different decisions. Again, the need is for nuanced political judgements and strategies, involving scientific expertise along with solidarity between scientists, workers and new social formations.

The need for nuanced political engagement with “good” science suggests some of the risks in any thematisation of science within archaic philosophical paradigms. One form of nuclear denial is the reluctance to engage with the concrete consequences of scientific knowledge, preferring to retreat behind the limited competence of the humanities scholar. It takes some hubris of philosophical interpretation to suggest that literary studies can offer to understand the fictional heart of the nuclear threat despite knowing very little about the science and technology involved. There will, doubtless, be philosophical, ontological and metaphysical questions that science and technology cannot answer. Nuclear arguments may carry within their forms and conditions of possibility the illusions of Western metaphysics, and decommissioning nuclear metaphors could turn out to be as significant as criticising the public lies of nuclear policy: but the nuclear android also imposes less philosophical imperatives to

engage with science, from medical science to nuclear waste disposal, and through the critique of the political economy of the nuclear android. None of this suggests that metaphysics should or could be deleted. To deflect engagement with the existing mess of the nuclear android back into metaphysical and literary questions nevertheless threatens to evade the existing threats, not just of nuclear annihilation but of Indigenous rights, environmental politics, and the raft of mediations and regulative practices on which any amelioration of nuclear damage depends. Nuclear war remains an imminent threat, but so does the persistence of practices and strategies that contribute to maintenance of the spectacle of the nuclear rather than its disarmament and decommissioning. To reduce the problem to the “threat” of nuclear war is to imagine that the actually existing industrial behemoth of nuclear production is a fiction. It isn't. Nuclear weapons testing and the history of nuclear accidents were not just fables, and nor was the arms race a war of sophistry and rhetoric, however much sophistry and rhetoric were deployed to disguise the ecocidal tendencies of the nuclear android.

3 second cheer for derrida: “dispatch” doesn't undo rhetorical ploys! (jk)

All this talk of *something that hasn't happened* (Derrida)? How do we depend on language in the prevention of nuclear catastrophe, as much as language in its making? Derrida says, as humanities people concerned with texts, we are qualified to consider the “nuclear issue.” We are not military or government or nuclear scientists (necessarily), but the “question” is intrinsic to our core concerns (core being my word: language has that way ...). Crisis and “competencies” and “decision” are the determiners of an “of now” argument, but the correlative of energy is not considered in its intrinsic risk, its inherent damaging. Only weapons – but mining and processing and reactors *are* weaponised; they are the weapons of undeclared wars against all people and the biosphere itself

(and beyond), macro and micro. Derrida says, “But the phenomenon is fabulously textual also to the extent that, for the moment, a nuclear war has not taken place: one can only talk and write about it” (23). It *is* taking place, it is an ongoing war in which hostilities will only end in total death. It is more than a phoney war, but it is not yet the catastrophe?

To talk and write about it alone is to let it happen. His claim that the atomic bombs dropped on Japan didn’t engender nuclear war, but ended “classical” war, is a ludicrous deployment of semantics for someone who knew. Why would he do this? French humanities as much as French science are of splitting the atom. Deconstruction needs to be reconsidered in the light of the silent apologia for splitting to increase energy. We are in a state of nuclear war, but not in the moment of the instantaneous, the catastrophe that ends language. Yet we live in its immanence, the theatre of conflict fed by the nuclear industry like any localised war we drop into, and out of, depending on newsfeed.

We live in a state of denial regarding the ongoing state of nuclear immanence, which is poisoning, underwriting the act, the catastrophe. The destruction of the archive is a consequence, and “belongs to the age” of the nuclear, as does deconstruction, we are told (it’s in the telling, not the reading, which is to assure, ensure as many exposures as possible in perpetuation of the word!). To free literature from the “nuclear epoch” is purpose, if literature is to undo the epoch towards which it is made inevitable. This issue does this – we hope. The phantasm of the nuclear referent is that text is the essential ingredient in making catastrophe, true, but the silences are around the nuclear infrastructure of our living lives and the conversation we make around even peace.

Violence against the biosphere is the generator of a language of self-affirmation, but no protection of all life, of all being. The song of mourning should be in all we now do, or at least be recognised as part of all life – sung to repair, to undo the nuclear, to allow the “epoch” to be “restored” to the non-nuclear we are told speed-wise was inevitable. It is not

and never was *inevitable*. It is a dead end. Knowledge isn’t exploitative action, at least not necessarily! And the “we” is the capitalist urge for dominion, not local belonging. The referent is Western techno-desiring for control. How can Derrida say “there is no common measure adequate to persuade me that a personal mourning is less serious than a nuclear war” (28)? Really? What is needed, needed, needed, is a “decommissioning” of all nuclear power generation, to allow an official path of undoing to restore unofficial existence, a claim of personal and communal rights of co-existence with non-human life which has, essentially, no rights under the dominant power structures that rule the planet. In Derrida is possibly the fear of the “unthinkable” as real-time action, but also that a morality might exist outside processing, outside the assimilations of thought, though he’d reject the terms of it. The missive is in the text before Trump gives the order to fire.

The fetishisation of language by Derrida in his “apocalypse” article is intentionally distressing as his opinion is intended as warning, but it becomes (and has become) exploitative in the ways he chose not to “foresee” in textuality: “we at least have to recognize gratefully that the nuclear age allows us to think through this aporia of speed (i.e. the need to move both slowly and quickly)” (21). This is written by one who came from a nuclear-invested country (he wrote in a nuclear EDF and Areva France, as well as presenting and teaching – and writing – in a nuclear America), a country whose resilience and resistance to loss in not only the Second World War but also the “loss” of Indochina and its Algerian empire (regarding which Derrida lost “home,” and said “complex thought” was required when considering in the light of colonial exploitation). And in this context and cascading “others,” “speed” becomes a metaphor for progress and independence ... Because generative *conversation* is a benefit of non-nuclear, growing in the absence of the cataclysm, the absence of nuclear invasiveness. A declaration like the following just looks glib and “amusing,” and “smart,” playing to the gallery:

The “nuclear age” makes for a certain type of colloquium, with its particular technology of information, diffusion and storage, its rhythm of speech, its demonstration procedures, and thus its arguments and its armaments, its modes of persuasion or intimidation. (Ibid.)

The showman (whom I have always admired deeply, but ...!), comes to the American town? The missile/missive aphorisms are playing-cards (barely on the table), in a way a nuclear culture can afford. As a poem, if it really is, it is dishonest outside entertainment. Its play is a mockery of process, and subscribes to a formalism of sensibility – the good order of words. The disruption comes not in vicarious participation but in full rejection of the whole idea of the nuclear, the atomic. **If we don't apply this complete refusal to the nuclear industry that is served up as peaceful but is really an ongoing enactment of war against the biosphere, we become the “masters” through our compliance and usage of the “resources”:** “what made Bataille laugh: the master has to live on in order to cash in on and enjoy the benefits of the death risk he has risked” (Derrida 30). Again, Derrida misses the irony of his own production and enunciation, his referentiality of self.

Which is not to deny the purpose of his textual drive against (all) war, and the truths of speaking:

That war would be the first and the last war in the name of the name, with only the non-name of “name.” It would be a war without a name, a nameless war, for it would no longer share even the name of war with other events of the same type, of the same family. (31)

But as Derrida finishes, the name of the deliverer of messages was “John,” and I was named after a biblical figure and thus my fate was said and written? No. That has nothing to do with me, nothing at all. Shut down the nuclear industry, we ask, we argue.

4 out of alain resnais's *hiroshima mon amour* (jk)

Nevers is where Tracy first encountered home life in France, and it's where so much of her

language of France resides. Living with a family in Nevers at eighteen at the beginning of the 1980s, knowing the town square, the historic buildings, the functionality of family going to work, to school. Nevers is 100 kilometres (upstream) from Dampierre nuclear power plant, commissioned in 1980 (construction began in 1974). Nevers is on the Loire. The river with a relationship to (the play of) light. It is said on the screen. It is said, uttered. Belleville is 75 kilometres (upstream) from Nevers, but construction only began in 1980 with commissioning in 1987, so only a later visit would bring her into the fallout range of a disaster. History and its undoing, in the making. She doesn't remember being very conscious of nuclear France as a teenager; she is now. We plot our routes through France desperately trying to avoid the sites.

What right does one have to personalise in such a way? In the faces of the two lovers in Alain Resnais's *Hiroshima Mon Amour* we have the recollection and the forgotten, the pain that omits and the pain that concentrates. Both wear the marks of war. But it is “Nevers” that dominates the narrative, and that's because the screenwriter, Marguerite Duras, inflects it deeply with her personal, her collective action of personal responsibility as resistance fighter during the war, and the violence she enacted directly or indirectly. It also wears its colonial markers with difficulty – the privileging of the European voice over the Japanese voice in the place of annihilation, where “Hiroshima” lost his entire family while he was fighting the Americans and their allies, The Allies, elsewhere.

In this ground zero of human hatred of the human, love is embodied in a desperate remapping of the universal human flesh. But still, there are the slippages of cultural difference, which there must be to prevent the complete colonisation. Peace is universal in the filmmaking, we hear, see – we are told. I listen to Crass's “Nagasaki Nightmare” and “Shaved Women” as I write this, over and over in my head, from memory, though I only played them again (and again) yesterday, aid to memory, and the collaborator becomes the lightning rod for the

collective guilt of those who might not have collaborated, but remained “occupied.” A paradox, as the paradox of the new city, with the Hiroshima architect, rising on the site of the old city. Product Exhibition Hall. Genbaku dome. Peace memorial. Czech architect. “Hiroshima,” architect. The rivers run clean? But somewhere, the plutonium of Hiroshima and Nagasaki. Never absent. And the poets who also write in the fallout of Fukushima. And there are other reactors, with their less than discreet leaks, “incidents.” Somewhere. 70,000 instantly dead. As if, in the instant, absolute agency. This “happily married” pair of places, wanting to make place anew. Bond places. France, atomic nation. Japan, Atomic nation. Tea House in English – marker. Trains anachronistic, and then there are the curtains. Open and closed. Open and closed. Case. Nevers doesn’t get so cold when you have central heating (nuclear powered), Tracy tells me – it doesn’t snow heavily – but maybe it’s cold in the cellars. And the uncle who knew more about emus than an Australian, because he was French? Bourges, where the uncle lived, is “only a short drive” – 68 kilometres west, was home to a weapons testing range (depleted uranium), but that will come in the 90s. The narrative out of sequence. Time unstable, even irrelevant, in the face of annihilation? But Tracy was back there in 1990, so maybe?

And so we document, and death is fast and slow, and instant and agonising. Love testing the limits of endurance, a selective and then uncontrolled pain. And the objections to a memorial because the crimes of the nation who suffered as all humanity suffers from the atomic. The objections. And the repetitions, the loops, the refrains, the temperature of the sun, for an instant. The sun came down, and Duras writes with Haiku-like parody of seasons and catastrophe. EDF is France’s independence in the community of being human. It is its future. First EDF nuclear power plant, 1962. The CEA was founded in 1945 – first thing after the war, almost, remember? And remember a warm day and in the streets when the news of the bomb on Hiroshima, his face suddenly blank as Nevers, having arrived on a bicycle

(Paris four hours by car in the early 1980s), started anew. First French nuclear test, not that long after *Hiroshima Mon Amour* made Left Bank cinema resonate down through the decades. 1960. Algerian war raging, in its Sahara. *Gerboise Bleue*. Tracy is Nevers is Tracy, and it imprints our lives, and our son’s life of French in the Australian wheatbelt. I have never been to Nevers, though I have trained past, past the reactors. Wrapped around each other, we don’t see our hands behind each other, marking the skin and flesh we are built out of, the same. Humans.

5 journeys and pathways of the nuclear android

A frequent response to invitations from the editors to respond to the nuclear was the reply from otherwise prolific critics, theorists and commentators saying that they didn’t have anything very much to say on the nuclear, as if it were all already known. Such replies were often coupled, however, with private stories of teenage nuclear dreams, of strange personal encounters with what we are calling the nuclear android, of radioactive sheep in the barns of some apparently unconnected memory. To the extent that we live through modes of nuclear amnesia, it came to seem important to register the status of damaged memories and memoirs, dreams and nightmares, nodes of connection with the nuclear that somehow don’t quite add up to arguments or sentences. These, too, are pathways of the nuclear android.

In the claims of presence we make in all that we purchase, in dwelling, even in traversal of space, we underwrite the nuclearisation of the planet. In forced and coerced movement, in dislocation and relocation, we are bound in the nuclearisation of the planet. Our objections are uttered in a contaminated atmosphere, on contaminated ground. For all the shorter half-lives, there are age-enduring half-lives, and the net result is accumulation. The contamination of sustenance is written into boustrophedon of the ploughlines, the unravelling of our reading

of agriculture and ley lines of interphasing with place, the legacy of spent uranium shells, of fallout from the reactors located in their rural-ity, the country mansions that offer a stage for pastoral performance, imagining country houses as performative-control spaces analogous to nuclear power plants. Raymond Williams knew of such houses, and he too was a victim of the atomic urge. Obviously Virgil and Theocritus could not be aware, but their texts have become embodied in the desiring of the pastoral which ignores, denies, or normalises the atomic. The very notion of sand that we measure according to the Unified Soil Classification System, and the quality of the soil we farm (sandplain is saturated in chemical fertilisers in wheatbelt Western Australia to make it viable for “sustainable” yields of crop), are variables in the nuclear pastoral.

Around Quairading, where “we” almost moved onto a block of 180 acres of bush protected by a caveat against clearing, in the “heart of the wheatbelt,” uranium explorers – scouting! – (exploring when the surface has been gathered into the folds) discovered enough uranium in the area to campaign for mining in that region. Mindax’s propaganda machine was in full swing, and its operators might well be individuals you know in this relatively isolated region. Recall when a child and your farmer uncle saying that mining companies are the controllers of all land in Australia. (Mindax) Reactors and crops in France, uranium mines and crops in Western Australia. Symmetry, especially as the French could well have been the colonial overlords of “Australia.”

In other words, for the mining, industry, military and government exploiters, ALL of Australia is still up for grabs, despite the overturning of the wrong, absurd, offensive and brutal notion of terra nullius. Land is still to be mined with abuse and manipulation of traditional land owners and custodians’ rights. Mineral sands mined near the coast, or further in at places like Eneabba, where the Eneabba Sandplain is a colonial nucleus for broadacre farming and the mineral sands industry. From there came the monazite we ground to dust in

pulverisers, pressed into soda discs and placed in the neat tray of the X-ray equipment. No masks, no protection, and for the school kids doing work experience, then casual weekend and holiday work, no film badge dosimeters were provided. Exposed. It’s a repetition, a refrain in this eclogue, this competition to be heard above industry, the forces of capitalism, the state. Poem after poem on the subject brings little relief, offering only brief intrusions into an issue of a humanities journal in which the “idea” of the nuclear is a branching tree, a diverting rhizome. A possibility for food and body, aspiration and actuality, for pragmatics and ontology to coalesce?

Maybe. Grandfather, a miner from the edge of the desert in and about Kookynie around the turn of the twentieth century, prospected in a region where now uranium start-ups are gearing up to feed the bucolic, the sustainable energy of a competitive, market-driven world. A world in which 55,000 British jobs focus on manufacturing arms, which are sold around the world, including to countries the United Kingdom itself labels as despotic. The dark web offers an inverted reflection of the armaments industry and its centre controlled by carbon rods, the nuclear. What is the link between pastoralism, mining, and the theft of children from their parents? It’s all too direct. The Stolen Generations of Aboriginal children are part of the ongoing legacy of colonialism in Australia, an active colonialism, still, and the clearing away and absorption of “threats” into the worker population is a *modus operandi*.

A couple of quotes from an auntie’s memoir are offered with no further explanation outside the fact that the land we are talking about is ancient land, and base metals drew the crowds, and now the crowd is driven out by uranium prospectors:

Something that Joyce remembered with horror all her life was the taking of the Aboriginal children from their families. Men would come unannounced and raid the camps, dragging away the screaming children and leaving behind their distraught mothers. After such visits, the wailing at the camps would go on for many days and nights. Joyce remembered

covering her head in bed to block out the noise and praying hard and fast for the little children to come back. When she was very young, convinced that the men would come to her house, she would grab Wally by the hand and run frantically to hide in the bush until it was all over. (Wheeler 37)

There are many stories of Joe. One in particular I remember was about the time he nearly died of thirst in the bush while prospecting. Some local Aboriginal people found him and carried him home. He was in a very bad way when they found him and obviously owed his life to them. (40)

And to go back to the monazite, radioactive mineral sand, mined and refined, spread occasionally over gardens, inhaled, absorbed, and that testing equipment, this is what the Environmental Protection Agency of Western Australia *desired*:

5.5 RADIATION HAZARDS

Radiation hazards associated with the proposal were considered with regard to both occupational and public health aspects.

Areas where there is transport or storage of radio-active substances (or irradiating apparatus) come under the Radiation Safety Act. Accordingly, the provisions of this Act must be complied with in respect to the following aspects of the proposal:

- Monazite transport to Fremantle;
- Monazite storage at Narngulu;
- on-site gauges using radioactive sources; and
- on-site X-ray analysis equipment.

The proponent would also be required to comply with relevant Codes of Practice. (eg Mineral Sands, Mining, Transport, Gauges, X-ray apparatus).

Other responsibilities would include:

- Education of the workforce about radiation safety (including dust); and
- ensuring that, at the eventual cessation of mining and processing, all radiation levels are reduced to levels which existed prior to mining.

The Authority noted that the Company has made a commitment to strictly adhere to all Western Australian Regulations and Commonwealth Codes of Practice relating to radiation protection including:

- a comprehensive radiation level monitoring programme at both the minesite and the dry process plant;
- isolation of the monazite process circuit into a separate section; and
- comprehensive dust suppression measures.

(ENEABBA WEST MINERAL SANDS PROJECT, AMC MINERAL SANDS LIMITED, Report and Recommendations of the Environmental Protection Authority, Environmental Protection Authority, Perth, Western Australia, Bulletin 403, Sept. 1989, <http://www.epa.wa.gov.au/sites/default/files/EPA_Report/EPA-bulletin_0403.pdf> (accessed 21 Sept. 2017))

And so, the journey from theory to activist resistance, from the CND marches and symbolic protests, from the wharf in Fremantle to protest against nuclear-powered ships and a “neither confirm nor deny” policy regarding the carrying of nuclear weapons. Protest after protest and yet there are still scores of American nuclear weapons on European soil and still the 7th Fleet extends, reaches, gathers. Aircraft carrier off Gauge Roads. Protest. Arrest. Arrest. Arrest. A politics forms around resistance to stupidity. Ingratiating economic arguments that see the “junior miners” drinking in the popular city waterhole, bragging about profits and grades of uranium. Hear them, see them. Know them.

Moratorium. Interlude. Dominic. Fishbowl. Starfish. “Space, the final frontier.” Excitement of EMP, O thermonuclear pacemaker stopper. Fused. Burnt out. O those hundreds of street lights out in Hawaii 1445 kilometres away. Colonial act to ensure design specifications of conquest. Driving down Canning Highway, Perth, the fundamentalist Christian Church warning the Russians. Strontium 90. The beast. Drive past on the way to Nanna’s and Grandpa’s. Constant annihilation reminder. Armageddon the word we used. Prince Planet. Astro Boy.

editorial introduction

Brought up nuclear. Even trying to make a backyard reactor. Some kids in other countries succeeded. Proud parents. And so, showing the child through the Western Australian Art Gallery – Lin Onus’s Maralinga sculpture/ installation: radioactive symbols in the cloud, colours of the British flag. Studying isodosing. And then taking thorium nitrate home from the analysis lab to the home lab in the back shed to see if it can be turned into “gunpowder.” At school the Geiger counter going mad – show & tell. MAD. Greenwich. Jason. Argonaut-type reactor. Unwittingly stand where it was, read the plaque, become illuminated. That’s me there, you, us. All the pronouns with radiation burns, special powers in the post-atomic comic age. Big bucks adaptations. The decommissioning. The safe-distance of time? A measurable question? The trace. And France at the centre. *Indochine*. Resistance. The ubiquitousness of violence. And the slippage from the US source (those water-cooled reactors below the surface, below the EMP’s reach?), as individualised as the collective, as randomly certain. Los Alamos. The centrality of island/s. Bikini atoll. Cannes red carpet catwalk gendering. Melting pot. Meltdown. Analogies as expedient as N2S2, “atomic sunrise.” Wondrous growth. Coral islands. Leakage. Rainbow warrior. Scientists. 1962. W49 thermonuclear warhead. Absorbable as “nuke.” Nuke. Robocop. Strangelove. Montebello. As familiarised and normative as Lucas Heights on the outskirts of Sydney. Of the waste dump planned for “isolated Australia,” where we pass through driving West to East, back again. Kimber (the white lion). Splitting towns, communities. Right-wing pastoralists offering up *their* properties, the bluebush and emus. A solution. Point of repair on the journey – all for one, one for all. And so to the train (Ginsberg “Plutonium Ode” making to stop movement), so to the truck (those dusty outback roads, roadtrain), the ship looking for a port. If “Australia had been French,” those voyages of discovery and colonisation. Roksby Down sports teams staying in Port Augusta accommodation – just next door, the Isotopes. Boldly look it in the fact, laugh it off, dust yourself down. Radiation

shield darkening. And so, secret traversals. Codes. Code. Enigma. IQ and genius lampoon of cultural integrity. Oh, look at him, dressed as a “nutty scientist” – how else could the bullied boy go to school? In that white labcoat. What else could he do? Play the part at twelve. Read Philip K. Dick. Red rag. And *The Guardian* following suit with its war diagrams – schematics of entertainment as we view our end: weapons icons representing so many assets. What choice? Air-glow aura. O magnetic field. O that 1859 telegraph combusting solar flare to compare to for newspaper hounds, of which we all are in devices to avatar our reportage. Screen glow. O cradle to grave.

Eddies of nuclear complicity. Idioms going critical. Nuclear metaphor degree zero. Financial meltdown. Political meltdown. Mutually assured destruction. Unilateral disarmament. Nuclear as the viral agent of the Cold War. Detente. Weapons grade. A dream, too, of the nuclear shadow. Half-lives in the meltdown of split atoms of memory. Nightmares for the accidents waiting to happen, waiting for nuclear Godot. Signifying chains gone global. Norse metaphors in nuclear metonyms. Nuclear as fuck. Nuclear as the limit of the known, the human playing god. Windscale. Old Mother Thorp reprocessing the spent rods. Swarf. Nuclear as the noun that lacks visible substance but leaves traces. Protest and Survive. Nuclear theatres. Tactical devices. Duck and Cover. Birth marks in at the peak of nuclear testing. The fallout from Bikini Atoll legible in our teeth. Three Mile Island. Marching against Torness, now some 30 miles from Edinburgh. Built in part to crush the Scottish coal miners and their union. Nuclear as the misnomer for the core values of the unit of ideological reproduction aka “the” family. Nuclear as the site of carbon warfare turning nasty in the name of auto-destruction. A ribbon of nuclear facilities across central Scotland, the “greatest” concentration of nuclear weapons in Western Europe. Air bases. Silos. Bunkers. Nuclear subs at Faslane. **Research reactor at East Kilbride. Nuclear subs rotting in Forsyth.** Nuclear Essex. No home from home for all that. No burial for the Kursk. Nuclear as the impossibility of sustainable capitalism. Cornwall powered by

Radon. Nuclear as the impossibility of a nuclear free country. Another political meltdown. Nuclear umbrellas for nuclear winters. Marching against all of that. Against reactors on coasts waiting for global sea level rises. Sizewell a few tides from London. Jason in Greenwich. 270 tonnes of radioactive waste removed from Christopher Wren's hospital. World Heritage. Safe as houses. The flowers of Sellafield. Nuclear as the negation of future proof tense constructions. Nuclear as decaying syntax. Cancerous baby clusters. Exterminism. Whether to run towards the fireball or seek shelter under the kitchen table. Nuclear as a Beckettian endgame. Four minute warning. Nuclear as the choice between civil defence and sexuality. Nuclear as the dark side of prog rock and heavy metal. Dirty Hanford. Indian Point Energy Center near New York. Nuclear as the song of the siren marked silent sprung, no rhythm of which to speak, just algorithms of decay. Marcoule, Côtes du Rhone near Avignon. Nuclear as the sovereignty of reason. Palomares B-52 crash. Franco style. Perpignan, France: kids found playing with boxes of Strontium 90 found in a field near the local airport. Nuclear as the hubris of the physicists. Boys with toys that kill. Oops-apocalypse. Discovering the sea you swam in was fed by nuclear ponds. Jewellery glowing in the dark. Doramad radioactive toothpaste. Yellow cakes and green hulks. Nuclear as the comedy of speculative fiction. Teeth scrubbed whiter than a Magnox toilet. Zones of alienation. Goiânia accident. Nuclear thieves killed by their deadly swag. A blue glow from the punctured capsule. Nuclear as an idyll of technocratic nostalgia for *techné*. The restricted sheep still grazing on Chernobyl-fed grass. The radionuclides that linger on lichens that feed the reindeer that feed the Sami that line the stomachs of the nomad. Nuclear as the cancer of cancers. Uraniumgate.

In these pages, the journeys in various "persons," points of view. There's Baden Offord's personal "you"; there's the journey through text, spirituality, resistance and colonial legacy in Hall. There's the filmic. The medical. The literary, where cause and effect split and produce a light that takes us to the source of compliance, of making military, of the nuclear-

milne & kinsella

capitalist false dawns. There is the resistance that leaves life instead of toxins. What we are building is a discourse of approaches to the invasive, to the "atomic," the "rip her to shreds," to quote Blondie. As the protests are written on machines powered by nuclear grids, or in places that see the disturbance of ground to feed those grids. As the protests are written facing contaminated seas where X number of nuclear devices have gone missing. Reactors lost. Where the Irish Sea holds the wastes of one nation's approach to energy and control in the face of another's refusal. Sellafield greeting Dublin as if the Anglo-Irish legacy were intact. An Act of Union that knows no Windscale, no colonial reality, no famine, no power grab. The ironies are appalling. People in this issue have written as they wish, though they all knew and know the absolute opposition to nuclear energy and nuclear weapons that the editors hold. And so, on the verge, on the brink, we continue about our daily activities – at the back of our minds, at the forefront, wherever it shuffles, it is there. Mortal coil. A history of accidents. *Unclean energy*. And intent.



bibliography

Alexievich, Svetlana. *Chernobyl Prayer: A Chronicle of the Future*. Trans. Anna Gunin and Arch Tait. London: Penguin, 2016. Print.

Anon. "Project Gasbuggy Tests Nuclear Fracking." *American Oil & Gas Historical Society*. Web. 19 Sept. 2017. <<https://aoghs.org/technology/project-gasbuggy/>>.

Babeau, Oliver, and Charlotte Fillol. "Reading Foucault in Nuclear Plants." Web. 21 Sept. 2017. <<https://halshs.archives-ouvertes.fr/halshs-00339914>> and <<http://econpapers.repec.org/paper/haljournal/halshs-00339914.htm>>.

Carpenter, Ele, ed. *The Nuclear Culture Source Book*. London: Black Dog, 2016. Print.

Cohen, Tom. "Anecographics Climate Change and 'Late' Deconstruction." *Impasses of the Post Global: Theory in the Era of Climate Change*. Ed. Henry Sussman. Ann Arbor: Open Humanities, 2012. 32–57. Print and web.

editorial introduction

Derrida, Jacques. "No Apocalypse, Not Now (Full Speed Ahead, Seven Missiles, Seven Missives)." Trans. Catherine Porter and Philip Lewis. *diacritics* 14.2 (1984): 20–31. Print.

Fox, Sarah Alisabeth. *Downwind: A People's History of the Nuclear West*. Lincoln: U of Nebraska P, 2014. Print.

Johnson, Robert R. *Romancing the Atom: Nuclear Infatuation from the Radium Girls to Fukushima*. Santa Barbara, CA: Praeger, 2012. Print.

Mackay, Robin, and Armen Avanesian, eds. *#ACCELERATE: The Accelerationist Reader*. Falmouth: Urbanomic Media, 2014. Print.

Marder, Michael, and Anaïs Toneur. *The Chernobyl Herbarium: Fragments of an Exploded Consciousness*. London: Open Humanities, 2016. Print and web.

Masco, Joseph. *The Nuclear Borderlands: The Manhattan Project in Post-Cold War New Mexico*. Princeton: Princeton UP, 2006. Print.

Mindax. 22 May 2013. Web. 21 Sept. 2017. <http://mindax.com.au/upload/documents/InvestorRelations/ASX/20130522_ASXreleaseQuairading22May2013-LodgementVersion.pdf>.

Nancy, Jean-Luc. *After Fukushima: The Equivalence of Catastrophes*. Trans. Charlotte Mandell. New York: Fordham UP, 2015. Print.

Selden, Mark, and Kyoko Selden, eds. *The Atomic Bomb: Voices from Hiroshima and Nagasaki*. Armonk, NY: Sharpe, 1989. Print.

Stang, John. "How to Tell Future Generations about Nuclear Waste." *Grist*. 8 Aug. 2006. Web. 19 Sept. 2017. <<http://grist.org/article/stang/>>.

Thompson, Edward. "Notes on Exterminism, the Last Stage of Civilization." *New Left Review* 121 (1980): 1–31. Web. 16 Sept. 2017. Print.

Thompson, E.P. "The Place Called Choice." *Collected Poems*. Ed. Fred Inglis. Newcastle upon Tyne: Bloodaxe, 1999. 55–67. Print.

Wheeler, Lorraine. *Branches and Twigs of the Family Tree*. York: n.p., 2010. Print.

Williams, Raymond. "The Politics of Nuclear Disarmament." *Resources of Hope*. Ed. Robin Gale. London and New York: Verso, 1989. 189–209. Print.

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