



Research article

Tracey Clement*

Making *The Drowned World* Manifest: Re-reading Ballard's Novel Through Art

<https://doi.org/10.1515/culture-2019-0050>

Received April 24, 2019; accepted September 25, 2019

Abstract: In 1970, J.G. Ballard used a London gallery as a laboratory in which to test ideas he was toying with, ideas that eventually found their way into his 1973 novel, *Crash*. Ballard found that art and literature were a fecund combination. Considering the richness of his imagery and the complexity of his ideas, it is not surprising that Ballard's works have gone on to inspire artistic responses. Perhaps the most well known of these is Robert Smithson's masterpiece, *Spiral Jetty*, 1970. However, most works inspired by Ballard's writing respond to vague notions of things Ballardian rather than to a particular novel or short story. In this essay I will focus specifically on recent contemporary Australian artworks which were made in direct response to Ballard's 1962 novel, *The Drowned World*, for a 2015 exhibition I initiated and coordinated titled *Mapping The Drowned World*. Using my own artworks as examples, as well as work made by fellow Australian artists Roy Ananda, Jon Cattapan and Janet Tavener, I will demonstrate that art and Ballard's literature continue to make a great synergistic team: together they produce more than the sum of their parts.

Keywords: Ballard, the drowned world, epistemological art, climate change, Australian artists, Roy Ananda, Jon Cattapan, Janet Tavener

Science fictions can be just as illuminating as science facts. English writer J.G. Ballard (1930-2009) knew this. He also seems to have understood that art too is epistemological, a method for both gathering and disseminating knowledge.

In 1970 Ballard staged an exhibition of crashed cars in order to test a hypothesis he was formulating about the unconscious erotic potential of the automobile collision. Three mutilated vehicles were displayed like sculptures at the New Arts Laboratory in London and Ballard hired a topless woman to interview visitors. According to Ballard, the response was overwhelmingly negative and the already damaged cars were vandalised "There was a huge tension in the air," he said, "as if everyone felt threatened by some inner alarm that had started to ring." (Ballard, *Miracles of Life* 239-40). Encouraged by the outrage caused by this exhibition, which Ballard described as "a psychological test disguised as an art show," the writer began work on his novel *Crash* (*Miracles* 240-41). Ballard found that art and literature were a synergistic combination.

Ballard is a writer of remarkable visual dexterity. Many critics have noted the richness of his imagery and his affinity with art, specifically Surrealism and Pop Art. For example, according to David Pringle, author of the first monograph on Ballard, *Earth Is the Alien Planet*, "Ballard is a writer who is drawn to visual symbols, an author with a painter's eye rather than a poet's tongue" (6).

Ballard himself admits that at one stage he thought he would like to be a painter, but he found that he was better at conjuring images with words than with brushes (Ballard *Miracles* 135). "I think I always was a

*Corresponding author: Tracey Clement, Independent researcher, Sydney, 2038, NSW, Australia,
E-mail: traceyclement@gmail.com

frustrated painter,” he said in a 1975 interview. “They are all paintings, really, my novels and stories.” The author even went so far as to declare, “When I start painting I shall stop writing!” (Ballard qtd. in Goddard and Pringle 9).

However, in addition to his crashed cars, Ballard actually did produce a limited number of works of visual art, including collages, an unrealised billboard project, pseudo advertisements, and typographically arresting micro-stories (Vale and Pringle). But luckily, he also continued to produce works of fiction. Only a handful of authors have such distinctive style and vision that their work enters the popular lexicon as a word. Think Homeric, Shakespearean, Joycean, Kafkaesque and Ballardian:

Ballardian (bæl'ɑ:diən)

Definitions

adjective

1. of James Graham Ballard (1930–2009), the British novelist, or his works
2. resembling or suggestive of the conditions described in Ballard’s novels and stories, esp dystopian modernity, bleak man-made landscapes, and the psychological effects of technological, social or environmental developments (Collins English Dictionary www.collinsdictionary.com/dictionary/english/ballardian)

Considering the richness of his imagery and the complexity of his ideas, it is not surprising that Ballard’s works have inspired artistic responses. Perhaps the most well known of these is Robert Smithson’s masterpiece, *Spiral Jetty*, 1970.¹ However, most works inspired by Ballard’s writing respond to vague notions of things Ballardian rather than to a particular novel or short story.² In the remainder of this essay I will focus specifically on recent contemporary Australian artworks which were made in direct response to J.G. Ballard’s 1962 novel *The Drowned World*.

Using my own artworks as examples, as well as work made by fellow Australian artists Roy Ananda, Jon Cattapan and Janet Tavener for an exhibition I initiated and coordinated titled *Mapping The Drowned World*,³ I will demonstrate that art and Ballard’s literature continue to make a great synergistic team: together they produce more than the sum of their parts. I also will outline how re-interpreting *The Drowned World* through the lens of my contemporary art practice radically altered my reading of the novel. And finally I will argue that both making and viewing art, particularly art made in response to post-apocalyptic visions such as Ballard’s, can convey the dangers of an anthropocentric world view in ways inaccessible to mere facts and figures.

Post-Premonitionism

I first read *The Drowned World* in the late 1980s, during the last gasp of the first cold war.⁴ Filled with eschatological anxiety I opened the pages of Ballard’s second novel and felt right at home. In this slim sci-fi book the streets of a major metropolis are flooded and transformed into fetid lagoons patrolled by carnivorous reptiles. Skyscrapers are semi-submerged and strangled by vines and a huge pulsating sun

¹ Haim Finkelstein convincingly argued that *Spiral Jetty* is Ballardian in a 1987 article. But he didn’t provide evidence that Smithson had actually read Ballard. (Finkelstein 50-62) In 2013 Australian author Andrew Frost corrected this omission (Frost www.ballardian.com/cosmic-sentinels-spiral-jetties-ballard-smithson-dean).

² To date, two major exhibitions of Ballardian art have been staged: *J.G. Ballard: Autòpsia del nou Milenni*, at the Centre de Cultura Contemporània de Barcelona (CCCB) in 2008, and *Crash: Homage to J.G. Ballard at Gagosian Gallery*, London, in 2010. Both exhibitions tended to feature works that had Ballardian overtones rather than artworks which were inspired directly by a particular piece of his writing. There were some exceptions in both shows.

³ *Mapping the Drowned World*, coordinated by Tracey Clement, 8-31 October 2015, SCA Galleries, Sydney. *Mapping the Drowned World* was part of my research methodology for my PhD project of the same name. I used the title again for my solo examination show at SCA Galleries, 21-23 September 2017. www.traceyclement.com/2017/10/13/phd-show-mapping-the-drowned-world/

⁴ I use the phrase “the first cold war” to acknowledge that since Donald Trump took the Whitehouse we are now in the midst of a new cold war. For more on this topic and the ethical implications of Ballard’s novel see (Clement “Soon it would be too hot”).

beats relentlessly. Ballard's vision of a post-apocalyptic world in which nature flourished while humanity was on the wane felt both realistic and inevitable, and it has shaped my worldview ever since.

In his seminal book on the cultural role of apocalyptic fiction, *The Sense of an Ending*, literary critic Frank Kermode (1919-2010) characterised the human condition as a temporal zone of uncertainty which he described as being caught in "the middle." (58) Kermode argued persuasively that post-apocalyptic narratives have a perennial appeal because they offer clear endings, something missing in everyday life. His central thesis is that literature is a way of making sense of the world, of ordering time into past, present, and future, just as theology, history and science are. For him these other models, which are normally considered factual, are actually "other fictional systems". As Kermode said, "It is not that we are connoisseurs of chaos, but that we are surrounded by it, and equipped for coexistence with it only by our fictive powers." (64) Kermode neglected to include art in his list of narrative epistemological systems, but I argue that art too is a way of telling stories and making knowledge.

As an artist I returned to the hot damp territory of *The Drowned World* in 2005, this time driven by a new eschatological crisis. As it became increasingly clear that climate change was not a disaster waiting to happen but a catastrophe already in motion, I re-read Ballard's novel and realised that we had been warned over and over that a climate crisis was coming, not only by science, but by the speculations of science-fiction.

While some scholars spend an inordinate amount of time trying to wrest Ballard out of a perceived sci-fi ghetto—for example, in his monograph on the author, *The Angle between Two Walls*, Roger Luckhurst characterised the genre as a nasty and sticky substance—this is not my concern (2). Ballard was passionate about the possibilities of sci-fi in the 1950s and 1960s and this is undoubtedly the milieu he was working in at the time (Ballard, *Miracles* 189). But *The Drowned World* is most accurately described as post-apocalyptic. The novel pictures a catastrophe of global proportions, an inexorable disaster: the end of the world.

Rather than restrict his story to any particular date, Ballard marks time by counting backwards from the post-apocalyptic present of the novel. In Ballard's scenario the entire geography of the planet has been reshaped by rising oceans and shifting silt. This ecological catastrophe was triggered by a series of violent solar storms just 70 years prior to the beginning of the story.

Robert Kerans is the central protagonist of *The Drowned World* and the action takes place in the ruined buildings and tropical lagoons of a city that was once London. Kerans is part of a bio-science team led by Colonel Riggs. His companions on the team include Dr Bodkin, a scientist and the only member of the team old enough to remember a pre-drowned world, and Lieutenant Hardman who is the first person to succumb to the nightmares of a throbbing sun that will soon also trouble Kerans. The only woman, Beatrice Dahl, is a civilian.⁵ As the novel begins the whole bio-science team has been recalled to the only major human city left: Camp Byrd, a UN run station in Greenland. They are preparing to leave behind the extreme heat, oppressive fecundity and damp glamour of the ruined metropolis in *The Drowned World*.

Inspired by Ballard's vivid prognostications, and in response to the burgeoning climate crisis, I coined the phrase *Post-Premonitionism* as the title for the 2007 sculptures I made in direct response to *The Drowned World*.⁶ This term implies the question, "What do you do when you have already seen the future?" And what did we do post-premonition? Not much, certainly not enough.

Feeling bamboozled by data and paralysed by the enormity of the crisis I turned to literature and art. As philosopher of Object Oriented Ontology Timothy Morton put it in his book *Hyperobjects*, the trouble with a facts-only approach that relies solely on reason "is that human beings are currently in the denial phase of grief regarding their role in the Anthropocene. It's too much to take in all it once." (183) Luckily, when facts fail, fiction steps in. In 2014 I once again revisited *The Drowned World*.

In this post-apocalyptic tale, as in most stories in the genre, Ballard pictures the present as the past of a ruined future; the perfect position from which to ask readers to consider how their actions now will

⁵ Elsewhere I have written an interstitial chapter which recuperates Beatrice Dahl and I have used her actions to position the novel as a kind of utopian vision (Clement, "Finding a Hidden Heroine in J. G. Ballard's Sci-Fi Novel, the Drowned World").

⁶ Tracey Clement: *Post-Premonitionism: J.G. Ballard's The Drowned World*, 1-17 November 2007, Groundfloor Gallery, Sydney. <https://traceyclement.com/category/post-premonitionism/>

reverberate later. And the fact that Ballard set *The Drowned World* in the ruins of a metropolis intensified the power of his warning; for as early as 1767 it was understood that ruins embody a kind of post-apocalyptic narrative. As Denis Diderot, grandfather of both the encyclopaedia and art criticism, explained:

Our glance lingers over the debris of a triumphal arch, portico, a pyramid, a temple, a palace, and we retreat into ourselves; we contemplate the ravages of time, and in our imagination we scatter the rubble of the very buildings in which we live over the ground; in that moment solitude and silence prevail around us, we are the sole survivors of an entire nation that is no more. Such is the first tenet of the poetics of ruins (Diderot qtd. in Goodman 196-97).

The interpenetration of past, present and future is a fundamental characteristic of both post-apocalyptic stories and ruins. Brian Dillon, who has written extensively on the topic, calls this temporal slippage the “confused chronologies” of ruins, while, postmodernist Frederic Jameson describes it as a sci-fi tactic, “a structurally unique “method” for apprehending the present as history” (Dillon, *Ruins* 14, Jameson 288). By combining this “method” with the trope of the ruined city, Ballard amplified the ability of *The Drowned World* to force us to examine the present as the past of the post-apocalyptic future.

After re-reading *The Drowned World* I completely reworked my earlier sculptural response. Following Ballard’s lead, the result, *Post-Premonitionism 2*, 2014-17, also utilised the post-apocalyptic language of ruins and was initially conceived of as a rather didactic warning highlighting the dangers of an anthropocentric worldview.

In *Premonitionism 2* fragile steel structures represent the skeletal remains of a ruined model city. Salt, rather than water, is the destructive element; a change appropriate to the desert continent of Australia. Scattered across a landscape of corrosive glittering white peaks, the man-made steel structures in *Post-Premonitionism 2* are twisted, rusty and ephemeral. They will eventually disintegrate completely, utterly helpless against the inexorable power of the natural environment (Figure 1).



Figure 1: Tracey Clement, *Post-Premonitionism 2*, 2014-17, salt, rusty steel, cotton, dimensions variable, max height 180 cm.

Since the eighteenth century ruins have been theorised as evidence of the adversarial relationship between nature and culture (Simmel 259, 261) and as symbolic warnings of the pitfalls of hubris, not just relics of the splendid past (Dillon, *Ruin Lust* 5-6). Like *The Drowned World*, at first glance, this sculptural installation seems to picture a violent nature/culture clash in which the folly and arrogance of humanity ended in inevitable and decisive defeat. As Ballard put it in *The Drowned World*:

Without the reptiles, the lagoons and the creeks of office blocks half-submerged in the immense heat would have had a strange dream-like beauty, but the iguanas and basilisks brought the fantasy down to earth. As their seats in the one-time boardrooms indicated, the reptiles had taken over the city. Once again they were the dominant form of life (17).

If there is indeed an ongoing battle between nature and culture it is clear in both novel and artwork exactly which has been victorious. However the process of making *Post-Premonitionism 2*, and its overwhelmingly potent materiality, quickly made me realise that both *The Drowned World* and my creative response can also be read (or re-read) in less adversarial terms.

The Drowned World Made Manifest

Post-Premonitionism 2 was created by stitching precise rectilinear buildings on to attenuated fabric mountains, then subjecting both to slowly dripping super-saturated salt-solution. In much the same way as stalagmites are formed, the salt crystals which grew on this diminutive mountain range took many months to accumulate. In sharp contrast, the fine steel structures began to rust immediately; streaks of red-orange ferrous oxide quickly stained the white salty peaks. And much sooner than expected the hard lines of my mini-city begin to soften and crumple: the natural and man-made elements began to merge and meld, becoming entwined (Figure 2).



Figure 2: Tracey Clement, *Post-Premonitionism 2* (detail), 2014-17, salt, rusty steel, cotton, dimensions variable, max height 180 cm.

Observing the slow process of salt crystals growing and the surprisingly fast disintegration of steel wire, I began to see the poetic significance of this co-mingling. A process which I had initially conceived of as a classic nature/culture clash, a symbol of mankind's hubris, a kind of scale-model of the sublime power of nature's omnipotence in action, started to evoke a different kind of relationship. In my mind *Post-Premonitionism 2* became less about the clash of opposites and more about the perpetual cycles of life and death. I realised that my ruined miniature city was as much a site of reunion as evidence of the aftermath

of conflict.

And interestingly, significantly, it wasn't until my artwork became manifest, asserting its materiality in the real world, that I realised that in *The Drowned World* Ballard also subverts the traditional interpretation of ruins as manifestations of the adversarial dynamic between man and the natural world. By re-reading the novel through the process of making art I saw that Ballard's post-apocalyptic vision can be read in multiple ways more nuanced than a straight forward nature/culture clash. And perhaps more importantly, I came to understand something that I had known instinctively all along, art is epistemological.⁷

The nuclear physicist Werner Heisenberg (1901-1976) seems unlikely as a champion of art. But in his book *Physics and Philosophy* the pioneer of quantum theory neatly summed up the position that art, like science, is a method for generating knowledge:

[T]he two processes, that of science and that of art, are not very different. Both science and art form in the course of the centuries a human language by which we can speak about the more remote parts of reality, and the coherent sets of concepts as well as the different styles of art are different words or groups of words in this language (98).

At its best, art offers a unique way to learn about the world and what it means to be human. Art is a language that can say what can only be felt, it can capture the ineffable. Art is a lyrical code capable of telling difficult and ambiguous stories. With this in mind I initiated and coordinated *Mapping The Drowned World*, a 2015 group exhibition in which six Australian artists, myself included, re-read Ballard's novel through the lens of art.

Mapping The Drowned World

I invited Roy Ananda, Jon Cattapan, Kate Mitchell, Janet Tavener and Gosia Wlodarczak to join me in *Mapping The Drowned World*. Each artist was sent a copy of the novel and was asked to create new work that responded to the themes and imagery of Ballard's book. Due to the pressure of other commitments, Kate Mitchell submitted a pre-existing video, *Beyond Setting Suns*, 2014. This work features images of the sun that seem to exert a mesmerising pull in a tragi-comic way. It was a very useful addition to the exhibition. But since it was not made in direct response to *The Drowned World* it will not be discussed any further here. Gosia Wlodarczak, an artist originally from Poland, literally responded to the text itself by focusing on individual words which she did not understand. Wlodarczak's contribution was about translation and misinterpretation, not the content of the novel, and will not be discussed here either.⁸

Sydney-based artist Janet Tavener produced a triptych of lush photographs, *Broken Surface*, 2015, in which richly carved gold picture frames appear to be entombed in water somehow made solid (Figure 3). Her interpretation mirrors my own initial response to the novel as she sought to turn the spotlight on the collateral damage caused by a perpetual nature/culture clash.

Tavener's interpretation of *The Drowned World* was informed by the fact that she read the novel while she was working in Florence, Italy. The artist was staying just two blocks from the Arno river and she became aware that in 1966 it breached its banks and inundated the city in the worst flood since 1557. The flood claimed lives, artworks and rare manuscripts—all irreplaceable. She explained that this historical evidence brought home the fact that the "constant drowning of the city" wasn't wild conjecture, "it was already happening."⁹ As Tavener wrote in the *Mapping The Drowned World* catalogue:

Reading *The Drowned World* while I was absorbed in all of this history was a major influence on the way that I processed the novel. In the series of photographs I made in response, *Broken Surface*, ornate picture frames that once contained masterpieces have been picked up by the current and sunken deep into the warming waters... the frames are a symbol: an artefact of culture in a battle that nature has won. (21)

⁷ Some, but not all, philosophers of aesthetics understand this too (Graham).

⁸ For more information on Mitchell's and Wlodarczak's work in the show see the catalogue (Clement, *Mapping the Drowned World*).

⁹ Tavener quoted (unless otherwise noted) from an interview I conducted with the artist in Sydney on 9 November 2015.



Figure 3: Janet Tavener Janet Tavener, *Broken Surface I-III*, 2015, archival print on Canson Baryta, 90 x 90 cm. Courtesy: the artist and May Space, Sydney.

Melbourne-based painter Jon Cattapan was the only Australian artist I located who had responded directly to the novel previously. Cattapan first read the novel in 1989, and as he explained, “At the moment I found Ballard, and in particular when I say that I’m talking about reading *The Drowned World*, I understood that here was not only a potential influence, but also a very kindred kind of artist, a kindred spirit.”¹⁰

In much the same way that I did, and around the same time, Cattapan came to terms with the inexorable power of nature and caught a glimpse of a post climate change future through the novel. Cattapan said, “It seemed to me, even at the time, that it was a very prescient book.” He went on to say that he can trace the impact of *The Drowned World* through his successive artworks. “It’s all kind of one big body of work that I think goes almost all the way back to that particular moment.”

For *Mapping The Drowned World*, Cattapan exhibited a new iteration of his ongoing project, *The City Submerged No. 25*, 1991-2015, which depicted, as he put it, “floating cities and very fluid landscapes.” (Figure 4). As Cattapan said in his statement for the *Mapping The Drowned World* catalogue:

The City Submerged is a fluid, evolving archive of fragments, made in different places, at different times, but always referring back to a loosely connected set of nocturnal urban reflections. It started in 1991, and all the while that I was making these paintings I was thinking about Ballard’s vision of *The Drowned World*, a narrative in which everything is getting ready to just slide away (9).

The major theme Cattapan identified in the novel and expressed through his painting practice was a sense of contingency. He felt that in *The Drowned World* anything can happen; it’s liminal zone where nothing is guaranteed, nothing is fixed, everything is fluid. Edges smear, they blur and bleed as boundaries, both social and physical, are easily breached.

Adelaide-based artist Roy Ananda has a history of working with other sci-fi and speculative fiction texts. The artworks he made for *Mapping The Drowned World* respond to Ballard’s emphasis on the futility of attempting to use the rational methods of science to understand or dominate the natural world. His series of small sculptures, *The Bodkin Experiments*, was named after the incident in the novel in which Dr Bodkin tries, and fails, to use science to disrupt Lt. Hardman’s solar nightmares by giving him a double alarm clock set to ring every 10 minutes (Ballard, *The Drowned World* 34).

One of the very first senses I had from the book is that there is this pull on humanity; the rational thing to do was to go north and go back to Greenland. But the ontology of this new world was acting on these people, like Hardman and Kerans, and pulling them south. So this sense of human beings being pushed and pulled by these very elemental forces was really strong... We try and measure those things with instruments but they are ultimately quite futile.¹¹

¹⁰ Cattapan quoted (unless otherwise noted) from an interview I conducted with the artist in Melbourne on 22 January 2015.

¹¹ Ananda quoted (unless otherwise noted) from an interview I conducted with the artist in Sydney on 7 October 2015.



Figure 4: Jon Cattapan, *The City Submerged No. 25*, 1991-2015, paintings, dimensions variable. Photo: Peter Burgess. Courtesy the artist and Dominik Mersch Gallery.

Ananda went on to add, “There is a perverse humour in making a functional object useless.” And the artist did just that. In addition to his conjoined alarm clock, (Figure 5) *The Bodkin Experiments* included a compass on a rotating portable record player unable to ever point due north; a thermometer under a heat lamp incapable of registering ambient temperature; and a sundial unable to tell time, rendered useless by 12 small spotlights. Ananda’s sculptures demonstrate, with dark humour and wit, the futility of a methodical, technologically driven scientific response to the post-apocalyptic world of Ballard’s novel.



Figure 5: Roy Ananda, *The Bodkin Experiments* (detail), 2015, found objects, mixed media, dimensions variable. Photo: Kristina Shapranova. Courtesy the artist and Dianne Tanzer Gallery + Projects.

In fact, science is not the answer to our current eschatological crises either, a point I sought to make in *Metropolis Experiment*, 2016-18. In this sculptural installation the whole city is a laboratory (Figure 6). But instead of sterile and gleaming stainless apparatus the steel tripods have grown rusty and monstrously huge. These structures also resemble electricity or telecom transmission towers, but they still support elaborate configurations of scientific glassware. The chemical solution used in this experiment has escaped. It has breached its man-made confines, and salt crystals proliferate unchecked. They creep up and over both glass and steel, corroding as they go, and they weave strange organic webs which resemble the intricate structures of some fungi.



Figure 6: Tracey Clement, *Metropolis Experiment*, 2016-18, rusty steel, lab glass, salt, cotton, dimensions variable, max height 200 cm.

Metropolis Experiment is clearly a science experiment gone horribly wrong; the methods of science spectacularly fail to reduce the ineffable mysteries of nature to something that can be quantified and tamed. This ruined model city is a none too subtle nod to the dangers inherent in believing that it is both possible and desirable to control nature.

Throughout *The Drowned World* Ballard too repeatedly reinforces the inexorable power of nature. In his novel the manifold forces of the natural world, through processes ranging from the swift destruction of flooding to the slow colonization of microorganisms, reduce the relics of culture to ruins. But watching this transformation take place so beautifully and serenely in *Post-Premonitionism 2*, I realized that in *The Drowned World* Ballard also presents this process of recuperation not as a violent battle, but as a gentle and inevitable entwinement. As in this passage:

Most of the plaster had slipped from the walls and lay in grey heaps along the skirting boards. Wherever sunlight filtered through, the bare lathes were intertwined with creeper and wire-moss, and the original fabric of the building seemed solely supported by the profusion of vegetation ramifying through every room and corridor (56).

Elsewhere, in describing the drowned cities, Ballard wrote, “Their charm and beauty lay precisely in their emptiness, in the strange junction of two extremes of nature, like a discarded crown overgrown by wild

orchids.” (*The Drowned World* 19-20). Instead of a juxtaposition of two adversarial opposites, the man-made crown of culture and the wild orchids of nature, Ballard insists that they are simply two extremes, equally beautiful manifestations of the same thing.

By presenting evocative images of nature and culture entangled over and over again, Ballard unequivocally asserts that man is part of the natural world, not separate or superior. Both *The Drowned World* and *Post-Premonitionism 2* can be read as utopian visions of nature and culture entwined. But these utopias are tinged with a deep sense of loss; in this case the loss of humanity in all our terrible brilliance, represented by the ruined city. In the final lines of the novel, Kerans, the central protagonist, chooses death over survival at any cost. Both novel and artwork point to the fact that man is not the centre of all things. They each picture a post-human world in which humanity accepts the possibility of extinction with dignity and grace, allowing the rest of life on earth to flourish, instead of clinging to the notion that we are in control as we careen towards a man-made apocalypse.¹²

What happens when we act as if we are undisputed masters of the universe is plain to see: our two concurrent eschatological crises—a new cold war and climate change—are creations of man. Ethicist Claudia Card (1940-2015) asserted in her book *The Atrocity Paradigm* that we can be held responsible for evil acts even when we are not the perpetrators. “To be culpable,” she said, “we ought to have acted differently.” This, she explained, includes the failure to take risks seriously (Card 18-20).

In *Post-Premonitionism 2*, the rusty remains of a miniature abstract city are positioned at eye height, precariously balanced on salty peaks of vaguely anthropomorphic volume. Instead of looking down on this ruined model metropolis, as we do with most architectural models, we face it head-on. It becomes a kind of mirror; a twisted reflection which emphasises our complicity in creating a post-apocalyptic future. *Metropolis Experiment* stresses the same point. This ruined city is constructed from over-engineered steel structures that roughly approximate human dimensions; it is made in our image. In this way, both of the sculptural installations I made in response to Ballard’s novel highlight the role we all play in the catastrophes they foreshadow. But it was making a series of *Drowned World* maps that really brought my own culpability home.

Learning by Making

In *The Drowned World*, Ballard gives Kerans the task of mapping the tropical lagoons in which the novel is set. And it is precisely because cartography symbolises rational scientific enquiry and the will to power that his failure to chart the shifting terrain of *The Drowned World* is so metaphorically potent. As geographer Yves Lacoste so succinctly put it, “It is important that we gain (or regain) an awareness of the fact that the map, perhaps the central referent of geography, is, and has been, fundamentally an instrument of power.” (1). The failure of Kerans is the failure of science to dominate the natural world.

Mapping is never a neutral activity. Maps are always staking a claim or making a point. All maps are artefacts deeply embedded in the cultures that make them and the conditions of their time. My *Drowned World* maps, 2014-17, had their genesis in Ballard’s eschatological anxieties, but they chart our current climate crisis (Figure 7). In these drawings I created new coastlines on maps of the world based on a hypothetical ocean-level rise of 70 metres. With the exception of the first map—*Petermann Star*, 2014, which I plotted by hand—these speculative coastlines were drawn with the help of Dr Sabin Zahirovic from the University of Sydney School of Geosciences and GIS software.

While I certainly gained knowledge through making the sculptural installations discussed earlier, knowledge which in turn affected how I interpreted *The Drowned World*, it was through drawing my *Drowned World* maps that the epistemological function of the physical act of making art became particularly evident.

Recent research in neuroscience, psychology and philosophy has sought to ‘prove’ what many artists have always known: that thinking and learning are embodied activities. The field of embodied cognition, which is still a relatively new area of enquiry, is beyond the scope of this essay. However, the salient point,

¹² (Clement, “Soon it would be too hot”).

clearly summarised by philosopher Lawrence Shapiro who traces the history, concepts and methodology of the field, is that in opposition to traditional theories of cognition—which conceive of the brain essentially as a computer disconnected from the body—embodied cognition is inextricably linked to corporeal action and the particular idiosyncrasies of each body (Shapiro 118-23).



Figure 7: Tracey Clement, *Drowned World: Bonne Projection*, 2015, pencil and rust on paper, 80 x 121 cm.

Philosopher Andy Clark takes this notion even further in his theory of extended cognition.¹³ As Clark explains in his book *Supersizing the Mind*:

[In extended cognition] the actual operations that realize certain forms of human cognizing include inextricable tangles of feedback, feed-forward, and feed-around loops: loops that promiscuously criss-cross the boundaries of brain, body, and world (xxviii).

Elsewhere, Clark specifically addresses drawing as a cognitive process. As he explains, writing and drawing aren't just tools used to aid thinking. They are ways of thinking; ways to extend cognition beyond the confines of the body (Clark, *Mindware* 149). In this way, art becomes a knowledge generating system with two possible modes. Learning can occur through interacting with artworks made by others, through observation, contemplation, and sometimes physical participation. And learning can also happen through the embodied action of making art works.

My *Drowned World* maps picture planetary geography re-shaped in a way that echoes Ballard's fictional post-apocalyptic vision in *The Drowned World*, but they are also grounded in the real. Polar ice is already melting, ocean levels are already rising, it's already getting way too hot. My *Drowned World* maps deliberately resemble seventeenth century maps such as those used by the Dutch East India Company during the long eighteenth century of the Enlightenment. However they picture not rational scientific

¹³ First developed in the 1998 article he co-authored with fellow philosopher David Chalmers titled "The Extended Mind." (Clark, *Supersizing the Mind* 220-32).

progress, but catastrophic change. They chart destructive flooding as most of the major cities worldwide succumb to rising tides; casualties of the climate crisis we have created.

In some of these maps the oceans that displace millions of people are painted with rust. This oxide is a powerful symbol of the steel-driven industrial revolution in particular, and the anthropocentric attitude that nature is a resource to be exploited in general. In other maps cities are *drowned* through the clearly labour intensive act of cross-hatched drawing: it takes some 20 to 30 hours to create each map. As a result, although the end product is static, these artworks have an important temporal component.¹⁴

The time-consuming nature of these works is a deliberate ploy which again highlights our role in creating our current climate crisis. When the rust and graphite oceans of these drawings encroach on to land we are asked to face the fact that this catastrophe did not just happen: it took centuries of dedicated labour, ruthless exploitation of the natural environment, manic consumerism, and blatant disregard for the consequences of our actions to reach this moment in time.

I knew this when I began making these drawings. But, somewhat unexpectedly, it was *making* the works that allowed me to fully comprehend the repercussions of our actions and inactions. Like a capricious and wilful god, I found I had the power to obliterate whole cities on a whim, symbolically destroying millions of lives and wreaking catastrophic environmental damage with the stroke of my paintbrush or the scratch of my pencil. This embodied action elicited a visceral sensation: a frisson of both fear and loathing as my own complicity and future fate became literally painfully obvious. My heart raced and I felt slightly ill.

Reading that the oceans are going to rise and creating a graphic representation of the results are two very different things. By inundating old coastlines and mapping new ones through art, scientific predictions about rising oceans suddenly hit home in a very powerful way. A tsunami of dry data that I had been unable to come to terms with crashed over me. Suddenly, through the process of making art, I understood on a fundamental physical and emotional level the ramifications of the crisis we have created.

Why Make Art When The End is Nigh?

“Soon it would be too hot.” Written during the first cold war, this line, the first in *The Drowned World*, neatly encapsulated the fears of that age. In the very beginning of the novel Ballard described the expanding solar disc that menaced his fictional world as a “colossal fire-ball” (7). He was invoking the red-hot fury of the atom bomb, an apocalyptic weapon that American President Harry S. Truman, the man who unleashed its terror on the people of Hiroshima and Nagasaki, described as having harnessed the power of the sun.¹⁵

When I re-read the novel in 2005 and again in 2014, Ballard’s dangerous burning star seemed like an all too real premonition of climate change, the crisis of that age. Now we have entered a new age of eschatological anxiety, one in which we live with both of these threats simultaneously.

One of the key lessons gleaned through reading *The Drowned World*, and re-reading it through art, is not that Ballard was a visionary, although, perhaps he was. Instead, by creating a novel that remains relevant—and still appears prescient—more than half a century after its inception, Ballard illustrates the fact that The End is always nigh.

As Kermode points out, every age has its eschatological terrors (94-95). The End is predicted at the turn of most millennia (Kermode 188) and, as demonstrated by the less than impressive Y2K bug of the early twenty-first century, these crises often dissipate with a whimper rather than a bang. Nevertheless we need to take our current threats seriously. We now find ourselves in the unenviable position of being immersed in two imminent crises, both of our own making. Something needs to be done. And for some of us that something is making art.

Making art may seem at first like an impotent gesture in the face of world-ending threats. But art tells stories using a nuanced syntax that cajoles, seduces, inveigles and invites instead of using facts and figures to impose a didactic point of view. Art is a code that invites interpretation, rather than incontrovertible

¹⁴ Watch time-lapse videos of me drawing the maps here: <https://traceyclement.com/category/drowned-world-maps/>

¹⁵ www.atomicarchive.com/Docs/Hiroshima/PRHiroshima.shtml

proof that defies debate.¹⁶ Art opens up discussion. Instead of passive listeners browbeaten by experts, art transforms the public into active cryptographers. Artists bear witness, but we don't just stand by and watch. Creating art, at its best, also creates knowledge, a response that is both appropriate and vital in any crisis. Images are powerful.

In his book *The Rise of Nuclear Fear* nuclear physicist Spencer R. Weart documents the efficacy of images of atomic mushroom clouds and of Hiroshima and Nagasaki laid waste in galvanising “ban the bomb” movements during the first cold war. Once these two cities were destroyed, Weart argues, the cold war became a war of images. “It was as if every bomb contained within itself the entire apocalypse,” he says (266).

In the context of early environmental campaigns, literary theorist Ursula K. Heise's *Sense of Place and Sense of Planet* also provides evidence of just how effective a single potent image can be, in this case, Earth seen for the first time from space. As Heise put it, “Set against a black background like a precious jewel in a case of velvet, the planet here appears as a single entity, united, limited, and delicately beautiful.” (22) The effect of these images was profound; they changed the way we see our planet (Heise 2-23).

Yet, despite compelling evidence that they can instigate change, the climate crisis in particular still lacks a single effective image. We are presented with pictures of sad polar bears stranded on tiny chunks of ice drifting in the increasingly warm seas of the Arctic. And while these images may elicit tears—and they certainly do—they fail to evoke a sense of imminent peril in those of us who live in warmer climes, and that is nearly all of us. The frozen north and south may be the front lines of the climate crisis but they are too remote, too wild and too cold to embody the very real threat that we all face.

And perhaps more to the point, we are now simultaneously threatened by nuclear Armageddon and climate change: two terminal dramas in a narrative which humanity has written. And if we survive these crises, then the next one too will no doubt be of our own making. Our entrenched anthropocentric worldview poses an ongoing threat, not only to ourselves but to all life on earth. How can we effectively tell this story?

In the remainder of this essay I will argue that art, specifically sculptures in the form of ruined scale-model cities—like those I have made in response to Ballard's novel *The Drowned World*—are a symbolic image both powerful and flexible enough to communicate the ongoing and ever evolving dangers of anthropocentrism.

Disaster Writ Small

The complex synergistic feedback loops of climate and the arcane machinations of politics—key elements of our two current eschatological threats—are both difficult to see clearly. For Timothy Morton both nuclear radiation and global warming are hyperobjects, “things that are massively distributed in time and space relative to humans” and “genuine nonhuman entities that are not simply the products of a human gaze” (1, 199). And he persuasively argues that while we may not be able to picture the vast, diffuse and networked hyperobjects that drive our “end-is-nigh” anxieties, we can see their effects (153). For example, the impact of a nuclear bomb is made very clear in photographs of Hiroshima reduced to rubble, and global warming was caught on film in pictures of New Orleans in the aftermath of Hurricane Katrina.

But even these powerful images of the metropolis destroyed struggle to depict the enormity of the damage done. An aerial photograph may be able to capture an entire city laid waste, but the distance necessary creates an emotional distance too. Miniaturised in this way, the city is flattened, reduced to pattern: formal elements such as line, shape and colour. It loses much of its emotional impact.

Conversely, as I discovered when making work in response to *The Drowned World*, the miniaturisation process of creating sculptures in the form of scale-model ruined cities, such as *Post-Premonitionism 2* and *Metropolis Experiment*, distils their effect. Writ small, the overwhelming scale of the catastrophe is

¹⁶ While Fisher doesn't include art in his storytelling methods he does write persuasively on the benefits of narrative in public moral argument (Fisher).

intensified: suddenly it is possible to see whole.¹⁷

These artworks draw on the fact that every metropolis is a powerful symbol. The city is aspirational; it represents the pinnacle of humanist culture. But as historian Marco Folin argues in the book he co-edited, *Wounded Cities*, a cycle of destruction and renewal is also literally built into cities. As he said, “It almost seems that in the West you could not conceive of a city without also automatically thinking of the image of its possible, indeed probable destruction (3-4).

Taking this notion a step further, I argue that every city can be read as a *memento mori*, a reminder of our own inevitable mortality. The city destroyed is such a potent image because deep down we know that all of our endeavours, like our corporeal selves, are transient, fragile, finite: part of a perpetual, inexorable cycle of growth and decay. In setting his end of the world scenario in a drowned metropolis Ballard tapped into something we understand instinctively: every city is built on its own ruins, both of the past and those still to come. Every city is always-already devastated, post-apocalyptic.

Like all post-apocalyptic stories and all ruins, the miniature ruined metropolises I have made are invitations to picture the present as the past of the ruined future. And the potency of their effect is accentuated by their relationship to architectural models, a particularly aspirational form of city building. A model of a city is inherently utopian: it represents an idea, a vision of hope for the future made manifest in miniature. It is real, but not fully realised. In this way, a scale-model city is infused with potential.

As manifestations of aspirations crushed, ruined model city artworks like *Post-Premonitionism 2* and *Metropolis Experiment* intensify the forward-facing temporal slippage inherent in all ruins. And the very form of these artworks leaves no room for doubt as to who is to blame for their destruction. Disasters in models of imaginary cities, like model cities themselves, don’t just happen. They are wilful acts, man-made phenomena, cautionary tales and *memento mori*: reminders of the terrible repercussions of the anthropocentric world-view.



Figure 8: Tracey Clement, *Post-Premonitionism 2*, *Metropolis Experiment*, *Drowned World* maps installed at SCA Galleries, 2017.

¹⁷ Helmut Puff discusses this effect in the context of models of real German cities which were bombed during World War II (Puff 255).

With its corrosive crystals boiling over and relentlessly spreading, *Metropolis Experiment* is far more aggressive than its predecessor. But it may be even more hopeful. Beautiful and quiet, *Post-Premonitionism 2* offers redemption through resignation: human extinction is pictured as poignant and inevitable. Loud and brash, *Metropolis Experiment* is nevertheless quietly optimistic: maybe, just maybe, we can change. After all, there is no point in yelling if there is no hope of being heard.



Figure 9: Tracey Clement, *Metropolis Experiment* (detail), 2016-18, rusty steel, lab glass, salt, cotton, dimensions variable, max height 200 cm.

Miniature ruined cities such as these are warnings, but they also tap into a tradition of votive offerings. In Renaissance Italy wax and silver models of cities were left at shrines with the hope of preventing cataclysmic earthquakes, plagues and wars (Folin and Preti 61-64). The sculptural installations I made in response to *The Drowned World* can trace their lineage to this practice. These artworks are ritual objects invoked to forestall disaster: talismanic gestures tinged with hope.

Works Cited

- Ballard, J.G. *Miracles of Life: Shanghai to Shepperton an Autobiography*. Harper Perennial, 2008.
- . *The Drowned World*. Berkley Medallion Books, 1962.
- Card, Claudia. *The Atrocity Paradigm: A Theory of Evil*. Oxford University Press, 2002.
- Clark, Andy. *Mindware: An Introduction to the Philosophy of Cognitive Science*. Oxford University press, 2001.
- . *Supersizing the Mind: Embodiment, Action, and Cognitive Extension*. Oxford University Press, 2008.
- Clement, Tracey, editor *Mapping the Drowned World: Six Artists Respond to J G Ballard's Novel the Drowned World*. Sydney College of the Arts, 2015.
- . "Finding a Hidden Heroine in J. G. Ballard's Sci-Fi Novel, *The Drowned World*." POPCAANZ, 2016. popcaanz.com/wp-content/uploads/2016/12/FICTION_Clement-2016_Drowned-World.pdf

- . "Soon it would be too hot: Revisiting *The Drowned World*," *Journal of Asia Pacific Pop Culture*, vol. 3, no. 1, 2018.
- Dillon, Brian, editor *Ruins*. Whitechapel Gallery, 2011.
- . *Ruin Lust: Artist's Fascination with Ruins, from Turner to the Present Day*. Tate Publishing, 2014.
- Finkelstein, Haim. "Deserts of Vast Eternity: J.G. Ballard and Robert Smithson." *Foundation*, vol. 39, 1987, pp. 50-62.
- Fisher, Walter R. "Narration as a Human Communication Paradigm: The Case of Public Moral Argument." *Communication Monographs* vol. 51 no. 1, 1984, pp. 1-22.
- Folin, Marco, and Monica Preti, eds. *Wounded Cities: The Representation of Urban Disasters in European Art (14th-20th Centuries)*. Brill, 2015.
- Frost, Andrew. "Cosmic Sentinels and Spiral Jetties: J.G. Ballard, Robert Smithson & Tacita Dean." *Ballardian*, 2013. www.ballardian.com/cosmic-sentinels-spiral-jetties-ballard-smithson-dean
- Goddard, James, and David Pringle, eds. *J.G. Ballard: The First Twenty Years*. Bran's Head Books Ltd, 1976.
- Goodman, John, editor *Diderot on Art: Volume II: The Salon of 1767*. Yale University Press, 1995.
- Graham, Gordon. *Philosophy of the Arts: An Introduction to Aesthetics*. Routledge, 1997.
- Heise, Ursula K. *Sense of Place and Sense of Planet: The Environmental Imagination of the Global*. Oxford University Press, 2008.
- Heisenberg, Werner. *Physics and Philosophy: The Revolution in Modern Science*. Allen & Unwin, 1958.
- Jameson, Fredric. *Archaeologies of the Future: The Desire Called Utopia and Other Science Fictions*. Verso, 2007.
- Kermode, Frank. *The Sense of an Ending: Studies in the Theory of Fiction*. Oxford University Press, 2000.
- Lacoste, Yves. "An Illustration of Geographical Warfare: Bombing of the Dikes on the Red River, North Vietnam." *Antipode*, vol. 5, no. 2, 1973, pp. 1-13.
- Luckhurst, Roger. *The Angle between Two Walls: The Fiction of J.G. Ballard*. Liverpool University Press, 1997.
- Morton, Timothy. *Hyperobjects: Philosophy and Ecology after the End of the World*. University of Minnesota Press, 2013.
- Pringle, David. *Earth Is the Alien Planet: J. G. Ballard's Four-Dimensional Nightmare*. Borgo Press, 1979.
- Puff, Helmut. "Ruins as Models: Displaying Destruction in Postwar Germany." *Ruins of Modernity*, edited by Julia Hell and Andreas Schönle. Duke University Press, 2010, pp. 253-69.
- Shapiro, Lawrence A. "Embodied Cognition." *The Oxford Handbook of Philosophy of Cognitive Science*. Eds. Margolis, Eric, Samuels Richard and P. Stich Stephen. Oxford Handbooks Online, 2012, pp.118-44. 10.1093/oxfordhb/9780195309799.013.0006
- Simmel, Georg. "The Ruin." Translated by David Kettler. *Georg Simmel, 1858-1918: A Collection of Essays with Translations and a Bibliography*, edited by Kurt H. Wolff. The Ohio State University Press, 1959, pp. 259-66.
- Truman, Harry S. "White House Press Release on Hiroshima: Statement by the President of the United States." Atomic Archive: National Science Digital Library 1945. www.atomicarchive.com/Docs/Hiroshima/PRHiroshima.shtml
- Vale, V., and David Pringle, eds. *J. G. Ballard*. V. Vale, 1984.
- Weart, Spencer R. *The Rise of Nuclear Fear*. Harvard University Press, 2012.