

**"Resurrected from its own sewers":
Waste, landscape and the environment in JG Ballard's climate novels**

Set in junkyards, abandoned waysides and disaster zones, J.G. Ballard's fiction assumes waste to be integral to the (material and symbolic) post-war landscape, and to reveal discomfiting truths about the ecological and social effects of mass production and consumption. Nowhere perhaps is this more evident than in his so-called climate novels, *The Drowned World* (1962), *The Drought* (1965), originally published as *The Burning World*, and *The Crystal World* (1966)—texts which Ballard himself described as “form[ing] a trilogy.”¹ In their forensic examination of the ecological effects of the Anthropocene era, these texts at least superficially fulfil the task environmental humanist Kate Rigby sees as paramount for eco-critics and writers of speculative fiction alike: that is, they tell the story of our volatile environment in ways that will productively inform our responses to it, and ultimately enable “new ways of being and dwelling” (147; 3).

This article explores Ballard's treatment of waste and material devastation in *The Drowned World*, *The Drought*, and *The Crystal World*, focussing specifically on their desistance from critiquing industrial modernity, and their exploitation, instead, of the narrative potential of its deleterious effects. I am especially interested in examining the relationship between the three novels, whose strikingly similar storylines approach ecological catastrophe from multiple angles. To this end, I refrain from discussing Ballard's two other climate novels, *The Wind from Nowhere* (1962), which he himself dismissed outright as a “piece of hackwork” he wrote in the space of a day, and *Hello America* (1981), which departs from the 1960s texts in its thematic structure (Sellars and O'Hara, 88). More broadly, I am interested in examining the ways in which the articulations of waste in these texts anticipate contemporary discussions in discard studies of waste's “liveliness.”

Ballard's climate novels merit particular attention for their interlacing of Surrealism, anxieties about post-war consumerism, and a nascent ecological conscience with climate fears that in fact predated mainstream environmentalism by several years. Indeed, if, as Anna Bramwell notes, “predictions of apocalypse were a significant milestone in the development of environmentalism in the 1960s” (54), then Ballard's 1960s climate novels are important cultural landmarks. *The Drowned World* was first published in 1962—the same year as Rachel Carson's indictment of

synthetic pesticides, *Silent Spring* (1962), which is generally viewed as the instigator of the environmental movement in English-speaking countries.² However, the connection Ballard makes between human activity and climate (unstated in *The Drowned World* and *The Crystal World*, but explicit in *The Drought*), was before its time. Spencer Weart notes that even scientists ascribed changes in the climate to a “supra-human, benevolent, and inherently stable [...] Nature” as recently as the 1950s (8), and as Jim Clarke points out, the term “global warming” was not coined until 1975 (7, as cited in Bunn). These texts are thus at a fascinating intersection between the vanguard of climate science and a mainstream culture for whom the anxieties at its heart would have seemed mere fantasy—and in this sense, they substantiate Clarke’s claim that “before there was climate change, there was nonetheless climate fiction.” Moreover, while the texts can be seen to serve, as D. Harlan Wilson has noted of *The Drought*, as “incubator[s] for the ideas that Ballard would cultivate and unbridle in *The Atrocity Exhibition* and *Crash*” (), they differ quite starkly from his later work in their treatment of wreckage as matter with productive potential. As Ballard himself repeatedly argued in interview, “These are transformation stories rather than disaster stories,” in which the central character “sees the imaginative possibilities represented by the disaster” (Sellars and O’Hara, 90; 202).

I define waste, here, as a categorisation that is attributed to objects as they disintegrate, fall into disuse, or become obsolete, but from which they may escape if they are re-purposed or rehabilitated. Waste in this sense is but a stage in the lifecycle of a thing, which is also to say, a stage that can pass. This temporal reading is especially pertinent to Ballard’s work given the instability of the objects and landscapes that populate his texts, and the frequent transformation they undergo as they fall in and out of use. Will Viney likewise argues that waste in Ballard’s work is distinct in its amenability to change: “Ballard’s ‘biography’ of things never fully ends, his waste frequently returns as want, merging end and beginning, creation and destruction.” Expanding on these readings, my aim is to examine the interplay of basic pragmatism and the Surrealist ethos of re-use in the characters’ recuperative practices; the centrality of interpreting remains and forging new things from discards to the very plot; the extent to which the characters’ constructions of the future involves a radical re-thinking of the categories of value/valueless; and the extent to which the re-use of waste objects and wastelands is explicitly framed as a physical embodiment of self-transformation.

Ballard's articulations of waste and re-use owe much to the French Surrealists, whose influence on his work as a whole is well documented.³ The texts' exploration of the convergence of material landscape and dream, and of physical world and psyche, bears the imprint of Surrealism's founders, André Breton and Louis Aragon—indeed, one of the central characters in *The Crystal World* is actually named Aragon, and the text itself appears to channel Aragon's *Paris Peasant* (1926) in its many references to shopping arcades and aquariums.⁴ Likewise, each text features references to specific Surrealist or proto-Surrealist paintings. In *The Drowned World* we find references to Max Ernst and Paul Delvaux (81), while the protagonist, Kerans, dreams of his colleagues “striding about in a huge Dalinian landscape” (63). *The Drought*'s protagonist, Dr Charles Ransom relates the strewn objects depicted in a reproduction of Yves Tanguy's *Jours de Lenteur* to the artefacts littering his houseboat—indeed, the reproduction itself can be seen as one such artefact, having been torn out of a magazine (15). Finally, in *The Crystal World*, a travelling priest, Father Balthus, compares the “penumbral” quality of the novel's setting to the proto-Surrealist painter Arnold Böcklin's “Isle of the Dead” (1880-1886). In each case, the works' disjointed, spectral qualities invoke the characters' spatio-temporal dislocation, and the imaginative possibilities underlying their strange new circumstances.

Most importantly for our purposes, the Surrealist ethos is manifest in the texts' ethos of re-use. Surrealism's founder, André Breton, identified cast-offs—or what he termed *objet trouvés* (“found objects”)—as a source of creative inspiration (Chipp, 366-455; Breton, 15; 28). Ballard extends this ethos in the climate novels to effectively imagine the creative rehabilitation of the *world itself*—to ask, that is, what new ways of being might emerge from the destruction of reality as we know it. This aspect of the Surrealist influence—and how it squares in turn with the ecological inflection of the texts—has generated surprisingly little discussion. While Jeanette Baxter astutely historicizes Ballard's work in relation to Surrealism, and persuasively reads the refuse secreted by the colonial villages in *The Crystal World* as matter to be “salvaged and examined for its traumatic historical content” (2009, 52), she neglects to connect these concerns to the burgeoning ecological awareness of Ballard's time. Similarly, while André Gasoriek argues that “the gradual disappearance of water” in *The Drought* “heralds a process of questioning and sifting in which all redundant aspects of the past will be discarded like unwanted scrap” (32), what Ballard's

characters do to render relevant *actual* scrap has generated little discussion. What we might call Ballard's peculiar brand of "eco-Surrealism" is particularly apparent in these novels due to the similarities they share at the level of plot. The three texts appear in fact to thematically and structurally echo each other in their central conceit as well as in their narrative trajectories, choice of similar place names (the "Mont Royal" of *The Crystal World* echoing the "Mount Royal" of *The Drought*), and largely interchangeable characters. The preoccupation with waste matter merely heightens this effect. In what follows, I consider how each of Ballard's climate novels interweaves the Surrealist aesthetic, and the Surrealist appreciation of cast-offs, with a kind of ecological consciousness that is however less interested in rehabilitating the devastated environment than in meeting it on its own terms, and exploring the stories generated therein.

"A drained and festering sewer"⁵: *The Drowned World*

In the first instalment of the Ballard's climate trilogy, the reader is thrust into a tropical environment rendered unrecognizable following several decades of rising temperatures and mass flooding. The cause of the heat is not human, but natural: a "sudden instability in the sun" has resulted in rising temperatures and tropical storms (*TDW*, 21). As a result, modernity has effectively been submerged in a uterine-like slime: "The bulk of the city ha[s] long since vanished, and only the steel-supported buildings of the central commercial and financial areas [have] survived the encroaching flood waters" (*TDW*, 50). In this new world:

the sombre green-black fronds of the gymnosperms, intruders from the Triassic past, and the half-submerged white-faced buildings of the 20th century still reflected together in the dark mirror of the water, the two interlocking worlds apparently suspended at some junction in time, the illusion momentarily broken when a giant water-spider cleft the oily surface a hundred yards away (*TDW*, 11).

This early passage brings together themes prominent in all three of the texts: the collision of past and present; a complicating of the nature-culture dualism (manifest in the intersection and eventual merging of 20th-century architecture and biological intruders from the "Triassic past"); the hallucinatory quality of the environment; and the conceptualisation of the landscape as an extension of the human psyche. Thus

Kerans's colleague, Bodkin, posits that the geophysical transformations taking place are awakening long dormant biological memories (*TDW*, 43). Kerans' dream of a "Dalinian landscape" mentioned earlier is particularly telling in this regard, as one of the effects of the rising temperature is the populating of the characters' sleep with overwhelmingly vivid dreams that increasingly converge with the landscape they encounter while awake (*TDW*, 50). The fragmented, detritus-laden, dreamscapes provide clues as to how to negotiate the physical landscape.

Much of the description in *The Drowned World* engages with the tension between the natural world and the industrial, which is also, implicitly, a tension between the primordial and modernity. This is not to say, however, that nature and culture are diametrically opposed in Ballard's climate texts: the relationship between the two is in fact far subtler. Nature here does not so much *erase* civilization so much as insinuate itself into and ultimately *transform* it. Waste thus serves as a site of negotiation between, or meeting point of, the natural and industrialised worlds. The strange new (biological and non-biological) forms emerging from or growing over the wreckage exemplify what discard studies scholars such as Joshua Reno have recently described as waste's quality as a "sign of life" (Reno), what Bruno Latour terms "actants"—matter with agential potential—and what New Materialists such as Jane Bennett, Maurizia Boscagli and Susan Morrison (among others) have termed the "vibrant" or "unruly" quality of seemingly inert things.⁶ Perhaps more interestingly, the burial of human-made matter under plants results in the creation of a hybrid entity that is in fact neither fully "natural" nor fully "mechanised," recalling in fact Latour's concept of the "quasi-object" which can be read both the perspectives of both the "hard" and "soft" sciences (Latour, 55).

This interplay between—and convergence of—animate and inanimate matter is most evident when Kerans plumbs the depths of the lagoon to explore a planetarium under water that Strangman believes contains hidden wealth. Here, Kerans encounters architectural ruins in which a vast ecosystem has grown:

The once polished aluminium roof had become dull and blunted, molluscs and bivalves clinging to the narrow ledges formed by the transverse vaulting. Lower down, where the dome rested on the square roof of the auditorium, a forest of giant fucus floated delicately from their pedestals, some of the fronds over ten feet tall, exquisite marine wraiths that fluttered together like the spirits of a sacred neptunian grove (*TDW*, 105).

Significantly, the convergence of plant life and industrial ruins is framed in surrealistic, and psychoanalytic, terms. The space, as Kerans perceives it, is “like a huge velvet-upholstered womb in a surrealist nightmare” (*TDW*, 108), and Ballard depicts his loss of consciousness, as he runs out of oxygen, as involving a radical undermining of linear time: “Epochs drif[t]” as Kerans “drift[s] from one pool to another, in the limbos of eternity” (*TDW*, 110). In turn, the underwater planetarium, which Strangman explicitly likens to the “Unconscious” (*TDW*, 104), is an extension of the psychic world, which (and this is important), is *also* composed of waste matter. The “fragments of furniture and metal cabinets” and “sections of floorboards, matted together by the focus and cephalopods” (*TDW*, 106) are but externalisations of the memory fragments and echoes of the primitive that haunt Kerans and his colleagues’ thoughts—and vice versa.

The central conflict in *The Drowned World* revolves around competing visions of how to occupy this new context. Where Kerans is intent on inhabiting it on its own terms—and is keen to explore the regressive impulses that its atmosphere, part-womb, part-primordial slime, inspires—the novel’s antagonist, Strangman, is intent on rehabilitating it. His vision is to drain the city and loot *objets d’art* and other valuables from its abandoned buildings—a task that, despite its dubious motives, is regarded favourably by the military as a form of “reclamation” (*TDW*, 158). Thus the novel’s central questions concern what one “does” with waste and how one should interpret devastation and reclamation in its different forms. These questions are largely explored through the characters’ engagement with the city after it has been drained and revealed to be London. And from the perspective of discard studies, the answers they throw up are fascinating. For in contemplating the space, Kerans observes:

Everything was covered with a fine coating of silt, smothering whatever grace and character had once distinguished the streets, so that the entire city seemed to Kerans to have been resurrected from its own sewers. Were the Day of Judgement to come, the armies of the dead would probably rise clothed in the same filthy mantle (*TDW*, 126).

The exhumed cityscape is explicitly framed as the return of the repressed, which Bodkin himself references in the opening chapters of the novel: ““Just as

psychoanalysis reconstructs the original traumatic situation in order to release the repressed material, so we are now being plunged into the archaeopsychic past, uncovering the ancient taboos and drives that have been dormant for epochs” (*TDW*, 44). The drowned world is but a repetition of the “uterine odyssey of the growing foetus” which in turn merely “recapitulates the entire evolutionary past” (*TDW*, 44). For this same reason, however, Kerans views the city’s draining and rehabilitation as unnatural, amounting to an embodiment of Freud’s notion of the uncanny, which Freud defined as that which “ought to have remained secret and hidden but has come to light” (228-256). For Kerans, the exhumed city is “a nightmare world that’s dead and finished”—draining it amounts to “resurrecting a corpse” (*TDW*, 159). The novel itself frames the exhumed city as a repulsive atrocity:

Veils of scum draped from the criss-crossing telegraph wires and tilting neon signs, and a thin coating of silt cloaked the faces of the buildings, turning the once limpid beauty of the under-water city into a drained and festering sewer (*TDW*, 121).

It is tempting here to draw parallels between this resurrection and that of Marion Crane’s car in Alfred Hitchcock’s *Psycho* (1960)—an iconic scene that similarly features the dredging up of a repressed modernity from a womb-like swamp. But even without going that far, we can confidently argue that what is at stake is whether the watery wasteland has a “right” to exist and breed new forms, or whether it should be “reclaimed” by developers and turned back into an economic hub—which is also to say, whether we should follow nature (aligned here with the unconscious, the imagination, the primordial, and the maternal) or civilization (aligned here with urbanisation and the circulation of capital). The re-flooding of the city in the last chapters of the novel suggests the former, as does Kerans’ decision to sail south on a rickety craft amid “lifeless objects, like the debris of a vanished continuum,” where the “towns and cities [have been] swallowed by the rising silt and vegetation” and “evidence of any man-made structures [is] scanty” (*TDW*, 169). However, the final line, describing him as “a second Adam searching for the forgotten paradises of the reborn sun” (*TDW*, 174), suggests a third option. It appears to suggest that nature’s re-possession of the landscape is an artistic act involving not the outright elimination but rather a re-purposing or re-working of an obsolete mechanized modernity.

“Muffled by the detritus of time”⁷: *The Drought*

The re-purposing of natural landscape and manufactured matter described above plays an even more prominent role in *The Drought*—partly because the ecological crisis at the novel’s centre is a result of human activity, rendering the ensuing desiccation of the landscape, mass migration, and abandonment of established social norms a mode of habituation to the increasing clash between humans and nature. The drought was caused by the suffocation of the ocean’s surface by a film of “saturated long-chain polymers, generated within the sea from the vast quantities of industrial wastes discharged into the ocean basins during the previous fifty years” (*TD*, 34). This “oxygen-permeable” membrane of waste lies over the ocean, preventing the evaporation of surface water in the air above—and there is no way to remove it:

The mechanism of formation of these polymers remained obscure, but millions of tons of highly reactive industrial wastes—unwanted petroleum fractions, contaminated catalysts and solvents—were still being vented into the sea, where they mingled with the wastes of atomic power stations and sewage schemes (*TD*, 34).

This eco-catastrophe is framed as an act of “retribution by the sea”: nature’s response to human beings’ use of cetyl alcohol films, which prevent evaporation from water reservoirs (*TD*, 34). This is acutely important, for it is an explicit reversal of what Kate Rigby terms the post-Enlightenment perception of nature as “follow[ing] its own mechanistic principles that [are] entirely separate from human morality and social relations” (3). The new ecological awareness underlying this text is also tinged with a pre-Enlightenment moralistic view of nature.

For twenty-first century readers, Ballard’s vision of a sea covered in reconstituted plastics bears an uncanny resemblance to the Great Pacific Garbage Patch, an immense collection of spinning marine debris located in the North Pacific Ocean.⁸ These millions of tiny particles of non-biodegradable waste, some of which are invisible to the naked eye, move from one area of the North Pacific Subtropical Convergence Zone to another in what their discoverer, Captain Charles Moore, termed a “swirling sewer” (Cahoun and Siedeman, 146). Moore, who discovered the patch in 1997—but whose interest in marine debris, like Ballard’s interest in ecology, dates back to the late 1950s—describes being “confronted, as far as the eye could see, with the sight of plastic [...] no matter what time of day I looked, plastic debris was

floating everywhere: bottles, bottle caps, wrappers, fragments” (Cahoun and Seideman, 144; 143). In contrast to Ballard’s plastic polymers, the marine debris does not stop water from evaporating but rather impedes sunlight from reaching plankton and algae, while absorbing pollutants like DDT.

While *The Drought* appears to anticipate this later eco-catastrophe, however, it differs from contemporary environmentalist discussions in its interpretation of the crisis. For the ecological warnings that belie the narrative are complicated by the characters’—and particularly the protagonist’s—attention to the myriad beautiful things that can be made from manufactured waste and to the eerie ways in which the natural environment and manufactured waste can end up fusing, seemingly of their own accord. The text is particularly at pains to convey how waste might re-configure the landscape. We see this in a striking passage, mid-way through the novel, in which Ransom and his fellow travellers arrive at a beach they have sought out in hopes of obtaining water. Upon their arrival they realise that the beach is no longer there—instead, they are confronted by an endless expanse of abandoned cars:

Below them, stretching along the entire extent of the coastal shelf, were tens of thousands of cars and trailers, jammed together like vehicles in an immense parking lot [...] Immediately all sense of the sea was lost, the distant dunes hidden by the roofs of trucks and trailers, and by the drifting smoke of garbage fires [...] The air was touched by the sweet smells of unburied sewage (*D*, 94; 96; 97).

The sea has been overshadowed—blocked out—by that icon of the twentieth century, the automobile (whose cultural significance Ballard explores in the four novels subsequent to *The Crystal World*), which however does little in the current circumstances. The sight is described neutrally, almost meditatively: for the characters, this is only one among many, more or less interchangeable, surrealistic reminders of a transformed existence.

Elsewhere, the text makes this transformative aspect explicit. The water-depleted landscape, for example, is festooned with manufactured waste instead of plant life:

the metal refuse scattered about the dunes provided the only floral decoration—twisted bedsteads rose like clumps of desert thorns, water pumps and farm machinery formed angular sculptures, the dust spuming from their vanes in the light breeze (*D*, 145).

This is not garbage as it is commonly viewed, but something far more elegant, awe-inspiring, and spectral. Nor, in this sense, is the setting dystopian—for its

aesthetic merits are undisputed. The text's assumption that waste can be beautiful anticipates the central credo of Ballard's 1976 novella, "The Ultimate City," which traces the "fierce and wayward beauty" of "discarded products of twentieth-century industry," and which in turn inspired contemporary artist Michelle Lord's series of waste-centred installations, *Future Ruins*, in which Lord juxtaposed manufactured waste with natural and industrialised landscapes. In the story, Ballard's protagonist Halloway perceives manufactured waste as something whose resistance to biodegradation renders it more "lively" than anything found in nature, and whose heterogeneity is awe-inspiring in its estranging qualities. Where *The Drought* differs from both Ballard's later story and Lord's response to it, however, is in its focus on the aesthetic merits of *transformed* waste—waste that has been turned into something else, or that has "grown" into the landscape to produce something radically new.

This transformative potential is in turn reflected in *The Drought's* intertextuality. While the echoes of T.S. Eliot's *The Waste Land* in much of Ballard's work are well documented, *The Drowned World* and *The Drought* stand out in their explicit references to the text.⁹ Where the characters in the former liken each other to Phlebas the Phoenician, the latter features "The Fire Sermon" as a chapter title (*TD*, 38), as well as references to Mrs Quilter the fortune teller (reminiscent of Eliot's Madame Sosostris) and to Lomax the transvestite (who recalls Eliot's transsexual, Tiresias). *The Drought*, moreover, self-consciously posits itself as a work of literary recycling, not only in its multiple references to Shakespeare's *King Lear* and *The Tempest*, but in the frequent attention it pays to the aesthetic merits of everyday constructions made of repurposed waste. The novel attends, in other words, to its own quality both as a recuperative work of art—in so far as it borrows from previous works of literature, including *the* paradigmatic work of twentieth-century literary recycling—and as a work about people "making new" (to borrow Ezra Pound's phrase) the world around them.

Recuperation in *The Drought* thus serves overlapping psychological, functional, and aesthetic purposes. For example:

At first [Dr Ransom] had assumed that [he] was returning to the past, to pick up the frayed ends of his previous life, but he now felt that the white deck of the river was carrying them all in the opposite direction, forward into zones of time future where the unresolved residues of the past would appear smoothed and rounded, muffled by the detritus of time. Perhaps these residues were the sole elements contained in the

future, and would have the bizarre and fragmented quality of the debris through which he was now walking (*D*, 152).

Waste, in this context, is not merely a manifestation of physical devastation and social unrest, but the matter from which the future itself will be composed. Navigating the future will involve making sense of these “unresolved residues of the past” (*TD*, 152) just as physically surviving will involve the re-purposing of cast-offs.

The search for cast-offs, in turn, is frequently framed as a philosophical quest as much as a practical one. Philip Jordan, the young man whom Ransom feeds and clothes when he visits him, is described early on as a “scavenger” whose trawling of the (fast-depleting) waterways for potentially useful waste—reminiscent of the boatmen scavenging for corpses in the opening of Dickens’ *Our Mutual Friend*—is also an effort to collect the remnants of a fast-vanishing world. Ransom in fact resists reporting Jordan to the police out of “fascination at the spectacle of this starveling of the river-ways creating his own world out of the scraps and refuse of the twentieth century, the scavenger for every nail and fish-hook turning into a wily young Ulysses of the waterfront” (*TD*, 23). Jordan is not just collecting things to re-sell: he is gathering history. Thus the collecting of refuse here is not just an indication of class—as in Dickens, where the poorest of society fish for dead bodies, sweep the streets, and collect rags—but of a stark anachronism in the making, an effort to salvage something as it disappears.

Tellingly, as the novel proceeds, these scenes of scavenging give way to descriptions of things that have been made from waste, and landscapes transformed by it. Thus Ransom happens upon an “old wreck” of a houseboat that Philip Jordan—now ten years older—has “put together from any scraps [he] could find” (*TD*, 85). From this perspective, the characters in *The Drought* are driven by the basic impulse to “make do” in the Lévi-Straussian sense—that is, they are *bricoleurs*, using whatever they find to physically survive and psychologically come to terms with the world around them (Lévi-Strauss, 16-36). Thus: “what was now in their lives and relationships they could form only from the residues of the past, from the failures and omissions that persisted into the present like the wreckage and scrap metal from which they build their cabins” (*TD*, 120). The re-purposing of waste objects is also an allegory for a broader re-orientating or re-fashioning of the self in the wake of past events—an effort to construct the future, both literally and figuratively.

This re-purposing extends to the landscape itself. While physically depleted, the wasteland in which they find themselves remains a fertile, albeit fraught, source for ontological meaning. When Ransom and Philip Jordan walk along the dry river bed, Ballard describes how “in the afternoon light the thousands of shadows cast by the metal refuse cove[r] the surface with calligraphic patterns”—natural sunlight and manufactured waste together create their own written language (*TD*, 150). The relationship between mind-fragments and physical waste however is rendered most explicit in Ransom’s realisation that his travels across the wasteland are “an expedition into his own future, into a world of volitional time where the images of the past [are] reflected free from the demands of memory and nostalgia, free even from the pressure of thirst and hunger” (*TD*, 176). The past is depicted here as a series of fragments deracinated from linear time, and divested of their original use-value (remembering; feeling; or meeting physical needs), while framing the dissipation of the narrative connecting these fragments as a form of liberation. The “something new” that emerges is neither a coherent sense of self, or a new physical entity, but a sense of possibility, which is, in turn, but a repetition or reiteration of an epiphany he had in the novel’s opening chapters: the recognition that “the past no longer existed. They would have to create their own sense of time out of the landscape emerging around them” (*TD*, 74). In each instance, Ballard interlaces psyche and material environment to image a future-in-the-making composed of elements of both lived experience and the physical world.

“The transfiguration of all living and inanimate forms”¹⁰: *The Crystal World*

The Crystal World provides a fitting “end” to the climate novels insofar as it takes the question of what one does with waste to its most extreme conclusion. Where *The Drowned World* envisages a world of nature-machine hybrids composed of manufactured effluvia overgrown by plants, and *The Drought* explores ways of transforming waste into *objets d’art* or dwellings, this last text imagines the transformation of objects into artefacts of themselves, and humans into something that is, in one of the characters’ words, “neither animate nor inanimate, neither alive nor dead” (*TCW*, 89). In this way, *The Crystal World* renders the tension between past

and future, humankind and nature, wastage and “making new” and self and landscape still more explicit. Much of the novel takes place in and around a forest adjacent to the diamond-mining town of Mont Royal in the Cameroon Republic, where the “proliferation of the sub-atomic identity of all matter”—that is, the duplication of matter—produces crystalline structures. The result is the petrification and replication of the object, their atoms frozen in time, and the supplanting of their material structure by crystals. Tellingly, this process is initially viewed as a commercial opportunity, then as a “cancer” (*TCW*, 66) akin to the leprosy that the protagonist, Dr Sanders, specialises in treating, and later as a “disease of time” (*TCW*, 89). It is, in other words, a disaster far more open to interpretation than the flood and drought of the previous two texts: for the multiple jewel-like artefacts or “sculptures” (*TCW*, 78) into which each object is transformed are, at the novel’s outset, prized as lucrative commodities by local market stall owners, and to be integrated into the local economy (*TCW*, 64). Indeed, the recognition of the value of crystallised objects as consumer goods merely extends the logic governing the trade in by-products from the mines described in the novel’s second chapter:

The small local industry had made full use of the waste products of the mines at Mont Royal, and many of the teak and ivory carvings were decorated with fragments of calcite and fluorspar picked from the refuse heaps, ingeniously working into the statuettes to form miniature crowns and necklaces (*TCW*, 32).

The relationship between the crystals and diamond mines has been read from a number of different perspectives. In Jeanette Baxter’s postcolonialist reading of the text, the vitrifying forest is a hallucinatory embodiment of the “society of the spectacle” (to use Guy Debord’s phrase) that drives colonialist exploitation of resources and labour. The “crystallising spectacle” is an embodiment of the “process of critical and imaginative immobilisation” under capitalism, and which the Surrealists viewed as the greatest threat to revolutionary protest (Baxter, 49). From a very different perspective, David Ian Paddy argues that “the crystals that overwhelm the land [serve] as a kind of viral revenge of the diamonds” (PAGE). Each of these readings foregrounds the text’s engagement with the relationship between natural landscape, capital, and empire. The ecological aspects of the crisis however have been less discussed. It is certainly significant, for example, that the announcement, mid-way through the novel, of the crystallisation of Florida, is perceived largely in terms

of its impact on the real-estate market, and is otherwise unremarked upon. Thus Sanders writes to his colleague:

But apart from the estimated losses in real-estate values and hotel revenues ('Oh Miami,' I cannot help saying to myself, 'you city of a thousand cathedrals to the rainbow sun!') the news of this extraordinary human migration has prompted little comment. Such is mankind's innate optimism, our conviction that we can survive any deluge or cataclysm, that most of us unconsciously dismiss the momentous events in Florida with a shrug, confident that some means will be found to avert the crisis when it comes (*CW*, 84).

The passage distills the view of many an environmentalist, for whom the largest obstacle to mobilising public awareness of ecological issues such as climate change (among others) is precisely the "confidence that some means will be found to avert the crisis when it comes." It is only when "the stallholders with their crystallised ornaments [have] been put out of business by the forest's own over-abundant economy" (*TCW*, 170)—which is to say, once the entire forest adjacent to Mont Royal has been crystallised, thus allowing anyone to gather crystallised objects from it rather than purchasing them—that awareness, and anxiety, about the crisis grows.

Notably, while the cause of the proliferating matter in *The Crystal World* is not human, but natural, it is striking how much the text reads, in fact, as an allegory for anthropogenic disaster in general, and for the proliferation of plastics in particular. Where Baxter reads the novel's many references to translucency and light in relation to the proliferation of glass in modernity (and the Surrealists' ambivalent relationship to such transparency), it is in fact tempting to read these descriptions as part of a meditation upon the prospect of a world overwhelmed by synthetic waste. Put differently, the text appears to elliptically explore a more extreme version of the catastrophe outlined in *The Drought*—for the crystallised, multiplying structures in *The Crystal World* are but a more intrusive, visible, and ubiquitous, version of the plastic polymers coating the sea in its predecessor. As with the previous two novels, however, Ballard complicates these ecological anxieties by focusing on Sanders' and his friends' awe for the crystallisation process's aesthetic merits, and, relatedly, on his perception that it contains imaginative possibilities overlooked by the majority of Mont Royal's inhabitants. Thus Sanders writes in a letter to a colleague that the crystallisation of the forest adjacent to the town "illuminat[es] my life. Indeed, the rest of the world seem[s] drab and inert by contrast, a faded reflection of this bright

image, forming a grey penumbral zone like some half-abandoned purgatory” (*TCW*, 83). The landscape’s desecration is perceived as a miracle that throws into relief the mundaneness of those aspects of the world that remain intact—a view that explicitly echoes the Surrealist faith in the phantasmagoric, otherworldly dimension of waste and its opposition to the humdrum everyday. Indeed, upon first encountering the vitrifying forest, Sanders feels no urge to find “a so-called scientific explanation for the phenomenon” and instead reflects that:

The beauty of the spectacle had turned the keys of memory, and a thousand images of childhood, forgotten for nearly forty years, filled his mind, recalling the paradisaical world when everything seemed illuminated by that prismatic light described so exactly by Wordsworth in his recollections of childhood (*TCW*, 69).

Elsewhere, the Jesuit priest, Father Balthus, asserts that each crystal contains the body of Christ: the forest is home to the “final celebration of the Eucharist” in which “everything is transfigured and illuminated” (*TCW*, 162). From this perspective, the petrification of the landscape is not a catastrophe, but rather imbued with spiritual meaning. Similarly, the resentment expressed by Captain Radek, after Sanders has attempted to save him from crystallisation by thawing his crystallised body in the Matarre River, recalls Kerans’ dismay at the sight of the drained cityscape in *The Drowned World*. Gesturing to the side of his body that was once crystallised and now “hang[s] loosely [...] like a long-dead corpse,” Radek begs Sanders to “take [him] back!” (*TCW*, 118). Far from being grateful of his rehabilitation, he longs to reverse it. Both scenes are indicative of a more general ambivalence regarding what crystallisation actually entails, whether the frozen objects and people are dead or alive, and whether one should intervene on their behalf or leave them as they are.

The ambiguity of the status of the crystallised humans in the text gains particular significance when considered in relation to the New Materialist conceptions of “lively” matter discussed in the section above. The crystallised humans Sanders encounters are veritable embodiments of these concepts: neither dead nor alive, they challenge the very criteria by which we define the human.

My reading here departs significantly from earlier analyses of the text, which tend to read the crystallised world allegorically or metaphorically.¹¹ Such readings, to my mind, risk overlooking the peculiar physical properties of the crystal world’s constituent parts, and the extent to which these defy taxonomic categories. The crystallised humans here are inert but not quite dead, insofar as the crystallisation

process delays or in some cases prevents rigor mortis (*TCW*, 50-52), insofar as their brains appear to remain active, and insofar as petrification itself, while arresting life as we know it, is perceived, as Gregory Stephenson notes, to contain “redintegrative, redemptive potential” (Stephenson, 60). These entities in other words oscillate somewhere *between* waste and use-value: the stillness resulting from crystallisation, and their freezing in time, renders them neither dead nor alive, neither entirely divested of utility nor obviously useful, neither entirely disposable nor capable of rehabilitation or re-integration into society. In this way, crystallisation stalls the very cycle of life (and, by extension, production), rendering redundant the very terms by which we define it. Indeed, just as Balthus views the Church redundant in the context of this new world, Sanders recognises in the novel’s final pages that “the whole profession of medicine may have been superseded [...] I don’t think the simple distinction between life and death has much meaning now” (*TCW*, 173). What is emerging, instead, is an alternate, hybrid state.

We see this hybridity most clearly in the depiction of crystallised icons of modernity—automobiles, crash helmets, refrigerators—that have become unwitting homes to strange new ecosystems. Mid-way through the novel for example Kerans and his colleagues encounter the “wreck” of a crashed helicopter:

At first, as they passed the aircraft lying like an emblazoned fossil in a small hollow to the left of their path, Dr Sanders failed to recognise it [...] The four twisted blades, veined and frosted like the wings of a giant dragonfly, had already been overgrown by the trellises of crystals hanging downwards from the near-by trees. The fuselage of the craft, partly buried in the ground, had blossomed into an enormous translucent jewel, in whose solid depths, like emblematic knights mounted in the base of a medieval ringstone, the two pilots sat frozen at their controls (*TCW*, 97).

Likened to a fossil, a giant dragonfly, and a jewel, the wrecked helicopter is no longer what it was—and though technically waste in its lack of functionality, it exudes an otherworldly, and aesthetically beautiful, quality. Such descriptions occur throughout the text: Sanders views a discarded helmet as a “glass porcupine” (*TCW*, 116), while the deserted streets of Mont Royal are “waist-high forests of fossil spurs, the abandoned cars embedded within them like armoured Saurians on an ancient ocean floor” (*TCW*, 128). In each instance, Ballard invites us to see the eco-catastrophe as something between a work of art and an alternate state of being to be embraced, since after all:

at this rate of progress at least a third of the earth's surface will be affected [by crystallisation] by the end of the next decade, and a score of the world's capital cities petrified beneath layers of prismatic crystal (*TCW*, 168).

As with the previous two novels, Ballard invites us to imagine the eco-catastrophe in imaginative terms—recalling what Ballard himself described as his interest in using desecrated landscapes and waste “as the building blocks of a new order” (Sellars and O’Hara, 206).

Thus Sanders comments, in a letter that makes up the penultimate pages of the novel, that:

there is an immense reward to be found in that frozen forest. There the transfiguration of all living and inanimate forms occurs before our eyes, the gift of immortality a direct consequence of the surrender by each of us of our own physical and temporal identities (*TCW*, 169).

Similarly, his later reflection, that “Somewhere in the crystalline streets of Mont Royal were the missing fragments of himself, living on in their own prismatic medium” (*TCW*, 173), underscores the fact that the eco-catastrophe at hand has upended the categories of authenticity and simulation: the true essence of things, it would appear, lies in the vitrifying landscape, just as the missing fragments of Sanders’ “self” reside outside his body.

* * *

Ballard’s climate trilogy approaches ecological disaster as a narrative problem, exploring physical and psychological transformations generated by anthropogenic and natural disasters. In *The Drowned World*, manufactured waste and the natural world mingle, breed new hybrid forms; in *The Drought*, the scavenging and re-use of manufactured waste provides a means of physical survival as well as a metaphor for the reconstruction of civilization; and in *The Crystal World*, the transformation of objects and people into “lively,” proliferating matter undermines the very definitions of life and death. All three texts pre-empt Rigby’s call for “speculative fiction in the burgeoning subgenre of ‘cli-fi’” to “imagin[e] a climate-changed future” and “come to grips with so complex and amorphous a socio-ecological phenomenon [...] in ways that could helpfully reorient current practices” (Rigby, 147). While these texts are

certainly not an environmentalist call to arms, their exploration of the catastrophic ramifications of mass production and consumption can be seen as inherently political. For in the very act of imagining anthropogenic environmental disasters they raise questions about the anthropocene as a whole. Upon his return from his 2014 expedition to the Great Pacific Garbage Patch, Charles Moore noted the “utility” of the patch in rendering pollution tangible: “It’s sometimes hard to explain how CO2 is a problem since we breathe it in and out with every breath. You can’t see it. But you can sure see plastic trash.” In a similar way, one might argue that while not an overt warning, Ballard’s climate trilogy renders ecological catastrophe nightmarishly, beautifully, and electrifyingly palpable.

Acknowledgements

Acknowledgements will go here – in the interest of anonymity I have removed them.

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¹ Uncredited, "Munich Round Up: Interview with J.G. Ballard" (1968) in *Extreme Metaphors: Collected Interviews*, ed. Simon Sellars and Dan O'Hara (London: Fourth Estate, 2012), 11.

² For a discussion of Carson and the emergence of the environmental movement, see Gibson, 59-80, and Dunlap.

³ For insight into Surrealism's profound influence on Ballard's work, see Jeanette Baxter, *J.G. Ballard's Surrealist Imagination: Spectacular Authorship* (Farnham: Ashgate, 2009). Baxter notes in particular that Surrealist imagery in *The Drowned World* serves to "set up provocative discussions about memory, trauma, and the recurrent nightmares of twentieth-century history" (17).

⁴ Louis Aragon, *Paris Peasant* (1926), transl. Simon Watson-Taylor (Cambridge, MA: EXACT CHANGE, 1999).

⁵ *The Drowned World*, 121.

⁶ See in particular Bennett, 5 and Boscagli, 3.

⁷ *The Drought*, 152

⁸ For insight into the discovery of the Great Pacific Garbage Patch, see Moore and Phillips.

⁹ Charles Nicol views Eliot's text as the most obvious literary analogue of Ballard's "The Voices of Time" (Nicol, 4, as cited in Wymer, ff. 5, 32). Gregory Stephenson sees the "imagery of the wasteland" in Ballard as a key affinity between his work and Burroughs,' although he only identifies specific elements of Eliot's text (e.g. the Fisher King) in *Hello America* (Stephenson, 156; 123, 124 and 125).

¹⁰ *The Crystal World*, 169.

¹¹ See in particular Gasoriek, 53; Baxter, 51; and Ian Paddy's assertion that the crystal world is "purely a metaphorical affair, not to be taken too literally as a disaster scenario" (PAGE).