

Nature Reclaims Her Own: J. G. Ballard's *The Drowned World*

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THE PICTURE ON THE FRONT COVER OF NATHANIEL RICH'S RECENT NOVEL *Odds Against Tomorrow* (2013) shows the half-sunken skyline of New York. 'So Hot Right Now: Has Climate Change Created a New Literary Genre?' asked one reviewer (Evancie). Perhaps; but the review also cites a much earlier example of climate change fiction, or 'cli-fi', published over a half a century earlier: J. G. Ballard's *The Drowned World*.

Soon it would be too hot. Looking out from the hotel balcony shortly after eight o'clock, Kerans watched the sun rise behind the dense groves of giant gymnosperms crowding over the roofs of the abandoned department stores four hundred yards away on the east side of the lagoon. Even through the massive olive-green fronds the relentless power of the sun was plainly tangible. The blunt refracted rays drummed against his bare chest and shoulders, drawing out the first sweat, and he put on a pair of heavy sunglasses to protect his eyes. The solar disc was no longer a well-defined sphere, but a wide expanding ellipse that fanned out across the eastern horizon like a colossal fire-ball, its reflection turning the dead leaden surface of the lagoon into a brilliant copper shield. By noon, less than four hours away, the water would seem to burn. (Ballard, *Drowned World* 7)

The 'end of the world' is a scenario that allows every novelist the chance to create an extraordinary opening scene: this is Ballard's. Here, his protagonist is, to borrow the chapter's title, 'On the Beach at the Ritz', watching the apocalypse from a lavishly furnished suite. And yet, like the Ritz itself, 'ivory-handled squash rackets' and 'hand-printed dressing gowns' (10) are an anachronism whose absurdity is everywhere underlined: by the giant *Anopheles* mosquito, now the size 'of a dragon-fly' (10); by the 'ancient impassive faces' of the iguanas and basilisks (18) that line the window-ledges; by 'the countless thermal storms' that 'rip through the horse-tails lining the creek' (8) and stir what is now little more 'than a garbage-filled swamp' (13); by the 'half-submerged white faced buildings of the 20th century' (10) that mark all that is left of a city. 'Had it once been Berlin, or Paris, or London?' (9) For Kerans, it is just another in a succession of 'green twilights' (19) that mark his progress, as humankind maps and records its own demise.

Published in 1962, the same year as Rachel Carson's *Silent Spring*, *The Drowned World* is (as its opening scene suggests) rooted in Ballard's childhood memories of Shanghai, centred in 'the flood-table of the Yangtse' (Ballard, *User's Guide* 199). But the novel also reflects both Ballard's deep and informed interest in ecology—and in humankind as an errant extension of it—and his feeling that, as he later put it, those living in the 'cosy' suburbs of the developed world have little sense of their vulnerability 'to climactic disasters' (Elborough 4). Nor is *The Drowned World* an isolated example of Ballard's interest in what we would now call 'cli-fi'. It is, in fact, just one in a series of novels—a so-called 'disaster quartet'—in which Ballard imagined the catastrophic impact of climate change (Winton 38). As Clarke observes in his own reading of Ballard's contribution to the genre, 'before there was climate change, there was nonetheless climate fiction' (7).

The first of Ballard's quartet, and indeed, Ballard's first novel, was *The Wind from Nowhere* (1962). Now forgotten by readers and largely overlooked by critics, the novel describes the impact of a super-hurricane that all but sweeps humankind from the surface of the planet:

Manhattan's under hundred-foot waves, most of the big skyscrapers and office blocks are down. Empire State Building toppled like a falling chimney stack. Same story everywhere else. Casualty lists in the millions. Paris, Berlin, Rome—nothing but rubble. (*Wind from Nowhere* 119)

No explanation is ever given for the disaster, although as one of the novel's characters remarks, 'maybe it's the deliberate act of an outraged Providence, determined to sweep man and his pestilence from the surface of this once green earth' (55). By contrast, the premise of *The Drowned World* (1962), the next novel in the sequence, is explained in some detail. Nearly all biological life cycles

are driven by solar radiation. In *The Drowned World*, Ballard assumes 'a sudden instability in the Sun' which in turn creates 'violent and prolonged solar storms' (21). 'All over the world, mean temperatures rose by a few degrees every year', and 'once-temperate areas became tropical' (21). As ice-fields and glaciers melt and water levels rise, the survivors migrate towards the poles 'under the direction of the United Nations' (21). Civilization begins its slow, steady collapse. Cities become 'beleaguered citadels, hemmed by enormous dykes and disintegrated by panic and despair' (21). Amphibian and reptile forms assert their ascendancy 'in the lagoons and swamps' (23). As radiation levels rise, mammalian fertility declines (23). By the time in which the novel is set—a time in which many of the survivors, Kerans amongst them, can no longer remember the world as it was before it was slowly drowned—'fewer than five million people were still living on the polar caps' (23).

This is, nevertheless, an apocalypse for which humankind is not responsible. In the third novel in the 'disaster quartet', Ballard makes an explicit connection between human acts and environmental apocalypse. Originally published as *The Burning World* in 1964, then expanded and republished the following year, *The Drought* describes a world in which climate change is the direct result of human interference. As the rains fail, it becomes apparent that pollution is the cause:

Covering the off-shore waters of the world's oceans, to a distance of about a thousand miles from the coast, was a thin but resilient mono-molecular film formed from a complex 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. This tough, oxygen-permeable membrane lay on the air-water interface and prevented almost all evaporation of surface water into the air space above. (36)

In short, the sea has revenged itself for the 'millions of tons of highly reactive industrial wastes' (and 'the wastes of atomic power stations and sewage schemes') (37) that have been (and continue to be) vented into it. A skin 'no thicker than a few atoms' has proven sufficient to 'devastate the lands it [the ocean] once irrigated' (37). As Ransom, the novel's protagonist observes, it is an 'act of retribution' that impresses 'by its simple justice' (37).

Ballard's account of the waste being pumped into waterways and watercourses follows (almost word for word) Rachel Carson's observations in *Silent Spring* (33). Perhaps more importantly, it also echoes what Garrard calls her 'apocalypticism' (94) and her tone of 'absolute authority' (95). In Carson's own words:

Only within the moment of time represented by the present [twentieth] century has one species—man—acquired significant power to alter the

nature of his world ... this power has not only increased to one of disturbing magnitude but it has changed in character. The most dangerous of all man's assaults upon the environment is the contamination of air, earth, rivers, and sea with dangerous and even lethal materials. This pollution is for the most part irrecoverable. (5)

In *The Drought*, however, rain eventually returns. It leaves open the possibility (although slight) that civilization as it is known—or as it was once known—might be, if not saved, then resurrected from the fractured and feuding communities that survive along the coast. As Garrard notes in his dissection of the apocalyptic rhetoric that has on occasion shaped environmentalist discourse, 'the real moral and political challenge of ecology may lie in accepting that the world is not about to end': 'only if we imagine that the planet has a future, after all, are we likely to take responsibility for it' (107).

In *The Drowned World*, however, nature's revenge (if it can be called that) is much more total. As a dwindling band of survivors slowly realize, flood-waters, storms, and rising temperatures are the least of it. Plagued by strange dreams, they begin to experience the withdrawal characteristic 'of all animal forms about to undergo a major metamorphosis' (14). As if anticipating the most controversial claims of those who, today, maintain that human behaviour is still strongly shaped by our evolutionary past, Ballard's characters are about to be reclaimed by long-buried, atavistic forces. Thus, and whilst the last of the 'disaster quartet', *The Crystal World* (1966), imagines the still more surreal prospect of a planet crystallizing into stasis, *The Drowned World* may with some fairness be regarded as the most interesting—and the most challenging—of Ballard's engagements with climate change. As our own climate continues to warm, it is also amongst his most prescient, highlighting not only our vulnerability to the impact of climate change, but the fragility of personality and individuality, the cults around which post-modern societies have (self-reflexively) constructed themselves. *The Drowned World* calls it all into question. In Ballard's own words, 'nothing is as secure as we like to think it is' (Elborough 5).

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Today, it is difficult to read Ballard's description of a drowned world without calling to mind the growing evidence for anthropogenic climate change.

Warming of the climate system is unequivocal, and since the 1950s, many of the observed changes are unprecedented over decades to millennia. The atmosphere and ocean have warmed, the amounts of snow and ice have diminished, sea level has risen, and the concentrations of greenhouse gases

have increased. ... It is *extremely likely* that human influence has been the dominant cause of the observed warming since the mid-20th century. (IPCC)

These are the most recent findings of the Intergovernmental Panel for Climate Change (IPCC), whose subsidiary working groups began reporting in September, 2013, ahead of the formal release of its Fifth Report in October, 2014. There is, however, nothing new about these findings. Over the twenty-five year history of the IPCC, its conclusions have simply grown more certain, more categorical. The possible has become probable and now virtually certain (the carefully coded phrase 'extremely likely' amounts to a greater than 95% probability). For the humanities, however, the 'burning question' (as Robert Macfarlane observed in 2005) is why so palpable a problem has taken so long to generate its own creative literature:

Cultural absences are always more difficult to document than cultural outpourings. But the deficiency of a creative response to climate change is increasingly visible. It becomes unignorable [sic] if we contrast it with the abundance of literature produced in response to the other great eschatological crisis of the past half-century—the nuclear threat.

As Macfarlane added, the authoritative bibliography of nuclear literature runs 'to over 3,000 items', amongst them Nevil Shute's *On the Beach*, probably the most successful Australian novel of all time. Indeed, and as if to acknowledge the success of that novel in alerting its readers to the implications of nuclear war, Dan Bloom, the American writer who in 2008 coined the term 'cli-fi', recently announced the launch of the (spectacularly entitled) 'Nevil Shute-like Literary Award for Climate-Themed Novels', no doubt in the hope that a contemporary novelist might have similar success in raising awareness of climate change ('Press Release').

Whilst nuclear catastrophe is a 'bulking presence' in post-war literature (Ford), there have nevertheless been other instances of novels directly concerned with climate change. The most notable is, perhaps, another Australian novel, George Turner's *The Sea and Summer* (1987). Later published in the United States as *Drowning Towers* (1988), and winner of the Arthur C. Clarke Award, it is by any standard an incisive reading of what the novel calls 'the Greenhouse Culture' (4). Its (lasting) influence can in turn be felt in a much more recent example of 'cli-fi', Jane Rawson's *A Wrong Turn at the Office of Unmade Lists* (2013), set in Melbourne in 2030. Nor is Rawson's an isolated example. Even the most cursory search suggests that, alongside literary heavyweights like Margaret Atwood, Barbara Kingsolver and Ian McEwan, a number of new writers are engaging with climate change, amongst them Lisa Devaney, Risa Stephanie Bear, and Andrew D.

Thaler (see *Cli-Fi Books*). This may well be, as the *Huffington Post* recently announced, ‘The Rise and Rise of Cli-Fi’ (Gal).

In this context, it is therefore all the more remarkable that, as early as the 1960s, Ballard began to rehearse the language of this new (sub)genre. Like the quartet of which it forms a part, the images conjured up in *The Drowned World* anticipate concerns that only years later formed themselves into a global discourse of environmental anxiety; this is ‘cli-fi’ before climate change was itself understood. Even Turner’s relatively early novel was published at a time when a growing number of scientists were discussing the possibility of anthropogenic climate change; within the year, the UN had created the IPCC (1988) to assess and synthesise this new body of knowledge. But perhaps more importantly, *The Drowned World* stretches and tests what we mean by ‘cli-fi’ itself.

Bloom first used ‘cli-fi’ simply to refer to—but also to popularise—climate-themed novels and movies (‘Origins’). His definition was deliberately open-ended, and by that token, it can accommodate both a novel like *The Drowned World* and Michael Crichton’s *State of Fear*, which explicitly denies the existence of anthropogenic climate change. But as even a short list of recent cli-fi suggests, many climate-themed novels have focussed on the dramatic, destructive potential of climate change. In Thaler’s novel *Fleet* (2013), for example, the last remnants of human society have put out to sea in a ‘fight for survival’, whilst Bear’s novel *Starvation Ridge* (2010-3) is set amongst competing survivalists in Oregon in the ‘devastated world’ of the mid-twenty-first century (*Cli-Fi Books*). It might therefore be argued that, notwithstanding their challenging opening premise, these are simply disaster novels by another name. This is no less true of big-budget Hollywood films like Roland Emmerich’s *The Day After Tomorrow* (2004) or *2012* (2009). Humankind survives, diminished but recognisable, amidst the relics of its past: by (re)definition, cli-fi becomes a ‘subgenre of dystopian fiction set in the near future, in which climate change wreaks havoc on an otherwise familiar planet’ (*U.S. Wired* 2013 qtd by Devaney). A more challenging form of cli-fi—and one closer to the sense of it as a sub-genre of SF—takes that journey a step further, and imagines how, in the face of a changing world, humankind itself could adapt or evolve. In the future world of Brian Burt’s *Aquarius Rising* (2013), for example, human-dolphin hybrids have ‘built thriving reef colonies among the drowned cities of the coast’, even as they are ‘confronted by rogue scientists determined to resurrect the land by slaughtering the sea’ (*Cli-Fi Books*). This is not just a change in the way human beings live, but a fundamental change in human being. This is, of course, exactly what Ballard anticipates in *The Drowned World*. In Ballard’s hands, however, this transition is itself deeply subversive, since it signals, not another triumphant adaptation, but an evolutionary reversal.

Thus, and whilst Ballard's novel is both prescient and original, its relationship to what we might now call 'cli-fi' is not necessarily a straightforward one. The reasons can, in turn, be found in Ballard's own experiences, and in particular, his early life. Born to wealthy British parents in Shanghai in 1930, Ballard's life of affluence and privilege was overtaken by war. Pivotaly, he spent several years in a Japanese internment camp. Even the most comfortable, settled, and stable world, he learnt, can be pulled apart: the realities, he later remarked, are 'just a stage set'; they can be 'dismantled overnight' (Elborough 5). In his fiction, that realisation is translated into a willingness (perhaps even a deep-rooted desire) to imagine the apocalypse. Indeed, it has been argued that Ballard's fictive world reflects a belief that 'we are witnessing the twilight of the West' (Oramus 14).

At the same time, however, this sense that the fabric of society is in itself fragile and easily destroyed allows—enjoins—Ballard to look beyond it to the deeper truths of human existence. This is perhaps why he explicitly rejected any suggestion that his novels were doom-laden disaster stories (Pringle). It was only *The Wind from Nowhere*—a novel he later dismissed as 'hackwork'—that he saw in these terms (Pringle). Instead, Ballard deliberately eschewed what Aldiss characterized as the 'cozy catastrophe' that characterized an earlier and 'peculiarly British' kind of post-war science fiction, 'in which a group of men and women survive in an apocalyptic scenario and comfortingly (even heroically) retain a grasp on conventional social and cultural values', their subjectivity unchanged (qtd in Baker 15). Instead, Ballard considered the much more radical possibility: that, as he put it in an interview, these changes might 'lead us to our real psychological goals' (Pringle). As Baker notes, 'Ballard's protagonists are only too eager to embrace the transformative possibilities of disaster, even if it is at the cost of personal dissolution' (15).

Like the other early novels with which Ballard made his name, *The Drowned World* also reflects his problematic relationship to the country whose nationality he held. Although Ballard was British, and lived much of his life in Britain, his views were nevertheless shaped by his early experiences of life in an International Settlement in a city that was, 'as it is now, 90 percent Chinese and 100 percent Americanised' (Ballard, *Miracles* 4). Its influence never left him. When in the immediate aftermath of war he visited Britain for the first time, he was (by contrast) repelled. London was, he found, 'a wasteland of poverty, ration books and grotesque social division' (*User's Guide* 185).

On the one hand, therefore, these 'first impressions' created a very specific antipathy towards London, the embodiment of a way of life (and mode of thinking) for which he felt nothing but contempt. On the other hand, Ballard's early experiences encouraged in him an openness and internationalism quite at odds with the parochialism he detected in post-war Britain. London is not and

was never his only fictional terrain. *The Crystal World* is set in West Africa, although ‘The Illuminated Man’, the short story on which it was based, was set in Florida (Ballard, *Stories* 605). Even in Ballard’s London-based novel, *The Wind from Nowhere*, a second narrative thread ranges between Nice and Genoa, whilst the action is clearly positioned in the context of a global atmospheric event.

But this is not simply to note that Ballard’s fictions are often cosmopolitan in feel or (like the apocalypses they describe) global in reach. In fact, Ballard is always in some sense dislocated. Thus, ‘where’ in the world sometimes seems to matter very little to him, perhaps because he sensed that nations and nationalities were, in a globalised context, steadily losing their relevance and pre-eminence. There is, after all, a certain placelessness about much of his fiction. *The Drought*, for example, is clearly set in a developed, English-speaking country, but which country is never revealed and impossible to pin down. Two place names *are* mentioned, Hamilton and Mount Royal, but their real-life equivalents are scattered throughout the English-speaking world: Hamilton may originally have been in Scotland, but it can now be found in Australia, Canada and New Zealand. There are echoes of empire here, and of the way in which colonialism blithely reproduces itself through acts of imposition and erasure. But there is also a sense in which this indeterminacy reflects Ballard’s growing and contrary sense of the developed world’s continued (if self-strangling) success. Shopping mall, high-rise, and gated community: Ballard’s later fiction dissects each in turn, as exemplars of a globalized super-modernity that erases difference, and with it, a sense of ‘place’. As Ballard suggests from the outset, that insulation—that isolation—comes at a price. As *The Drought* opens, Ransom has abandoned his life on land for life on the river. Those who think he has simply fled a broken marriage fail to grasp that ‘the failure of Ransom’s marriage was less a personal one than that of its urban context, in fact a failure of landscape, and that with his discovery of the river Ransom had at last found an environment in which he felt completely at home’ (8). Life on land—the modern, urban life to which Ransom refers—is reflected in the house he once shared, a place whose furniture and decorations ‘were as anonymous and free of associations as those of a motel’, a ‘perfect model of a spatio-temporal vacuum’ (33). As Augé remarks, ‘non-places are the real measure of our time’ (79).

There is, however, one final consideration: Ballard’s relationship to the SF genre. Although seen as a leading light in the ‘New Wave’ of British science fiction that emerged in the 1960s, Ballard’s involvement with it was always an uneasy one. It is notable that of all his novels, only *The Drought* was ever nominated for a SF award. Nevertheless, science fiction offered Ballard ‘a way of exploring and perhaps coming to terms with the unprecedented scale of twentieth-century social and technological change, a way of grasping how and why human life had developed in the ways that it had’ (Gasiorek 9). Indeed, there is a strong sense in

which Ballard saw science fiction, not simply as reactive, but as proactive and pioneering, an investigative form that would enable the writer to conjure challenging alternatives to contemporary realities (Elborough 5). As he remarked in an article entitled 'Which Way to Inner Space?', published in the same year as *The Drowned World*,

I firmly believe that only science fiction is fully equipped to become the literature of tomorrow, and that it is the only medium with an adequate vocabulary of ideas and situations. (*User's Guide* 198)

But as the title of Ballard's manifesto suggests, his real interest lay in a new form of science fiction that would move the emphasis away from the physical sciences ('rocketry, electronics, cybernetics') and towards the biological sciences (*User's Guide* 197):

I'd like to see more psycho-literary ideas, more meta-biological and meta-chemical concepts, private time-systems, synthetic psychologies and space times, more of the sombre half-worlds one glimpses in the paintings of schizophrenics, all in all a complete speculative poetry and fantasy of science. (*User's Guide* 198)

Ballard was particularly interested in psychology, and in the internal landscape of the mind. Indeed, several critical studies have focussed on his debts to Freudianism (Francis) and Surrealism (Baxter); arguably, this is also true of Luckhurst's poststructuralist reading, a reading that 'does not fully escape the psychoanalytic context it so vocally interrogates' (Francis 11). But it is also apparent that Ballard is always (if not equally) concerned with the external correlative of that inner space. To call it 'the environment' would be to miss the subtlety of Ballard's argument, but the fact that there is no better expression for it reflects exactly the problem with which novels like *The Drowned World* so fruitfully engage.

The key to this reading is the fact that, whilst Ballard is concerned with the psychological, he is also fascinated by the biological: although *The Drought* offers only the sterile echo of a living world, still littered with the industrial detritus of a society that (literally and metaphorically) engineered its own undoing, *The Drowned World* is crowded with dizzying and disorientating descriptions of 'the miasmatic vegetation' that now crowds out the city (19). Thus, and when (in the same article) Ballard remarked that 'the only truly alien planet is Earth' (*User's Guide* 197), he was not simply referring to the dark and shadowy spaces that psychology has so insistently highlighted. In striking ways, the earth itself remains unfamiliar to us; arguably, it becomes more not less so as human society increasingly insulates itself from the environment. The still more intriguing

question, which Ballard investigates in *The Drowned World*, is the extent to which we remain deeply attached to (and shaped by) a world from which we have long considered ourselves separate, distinguished, and over all, dominant.

How, then, do these influences shape the fictional terrain of *The Drowned World*? Centrally, it is not a conventional disaster story or 'cosy catastrophe'. The end is inevitable: the 'polar redoubts' will fall (45), and the 'tacit assumption' that a Western-style civilization 'would continue much as before, with the same social and domestic relationships, by and large the same ambitions and satisfactions' is revealed as hopelessly optimistic (45). Like every other capital city in the developed world, London is sinking, nearly sunk. And whilst the novel is filled with commanding images of a drowning city, its identity is a matter of indifference to a survivor like Kerans. His life has been a migratory, post-apocalyptic one, its only real reference point 'living in half a mess-tin' at Camp Byrd, one of the polar refuges (15). By contrast, Kerans' colleague Bodkin ('twenty-five years his senior') has actually lived in the half-sunk cities of *The Drowned World*, and spends his spare time 'searching out former libraries and museums' (20). 'Not that they contained anything other than his memories', adds the narrative (20); but that is entirely the point: memories separate place, 'defined as relational, historical and concerned with identity' (Augé 77), from non-place, and in turn, memories explain why Kerans is increasingly drawn to what otherwise seems to be a profoundly alien and alienating new world.

It is, of course, a world that is continually rewriting itself. Mapping it is pointless, as all but the most inflexible member of Kerans' survey team now accepts. The moment they trace the pattern of keys and lagoons, it is once again transformed by rising water levels and fresh inundations of silt (15). The only certainty is the continuing erasure of what little is left of the civilized world. As Kerans remarks, 'we all know the news for the next three million years' (15). But the survey may also be pointless because it brings to bear the wrong tools, as Kerans (himself a scientist) begins to realise. Reason is losing its purchase; 'old categories of thought' are becoming 'an encumbrance' (14); and for Kerans, the team's programme schedules increasingly resemble 'gnomic and meaningless graffiti' (40).

The reason lies in the nature of change. Spurred on by high levels of radiation, the flora and fauna of the planet are quickly adapting themselves to rises in temperature and humidity, 'countless mutations completely transforming the organisms to adapt them for survival in the new environment' (42). But, paradoxically, the new environment is a very ancient one, directly comparable with the Triassic period (42). This 'avalanche backwards into the past' (42) is the key to the change that survivors like Kerans are beginning to experience. As Bodkin observes, 'how often recently most of us have had the feeling of *déjà vu*,

of having seen all this before, in fact of remembering the swamps and lagoons all too well' (43).

Kerans shares the feeling, and Bodkin knows it. Confronted by an apparently unfamiliar world, Kerans in fact feels a commanding sense of *familiarity*, a reaction that echoes Freud's discussion of the uncanny, which is 'uncanny only because it is secretly all too familiar, which is why it is repressed' (Freud 36). As Bodkin speculates, this sudden reversal back into pre-history has cued 'innate releasing mechanisms literally millions of years old', mechanisms that 'have lain dormant through thousands of generations but retained their power undiminished' (43).

These are the oldest memories on Earth, the time-codes carried in every chromosome and gene. Every step we've taken in our evolution is a milestone inscribed with organic memories ... each is a record of a thousand decisions taken in the face of a sudden psycho-chemical crisis. (43)

Driven by this unconscious—this preconscious—recognition of 'archaeopsychic' imperatives, the biological is now driving psychological change. As the boundaries between inner and outer worlds, and between inner and outer space, begin to collapse, it becomes apparent that:

A more important task than mapping the harbours and lagoons of the external landscape was to chart the ghostly deltas and luminous beaches of the submerged neuronics continents. (45)

Although it is implicit in Darwinian thinking, the idea that we are still haunted by an evolutionary dynamic must have seemed highly speculative when *The Drowned World* was first published; in the form of evolutionary biology and evolutionary psychology, it remains controversial today. Nevertheless, there is a recognition that human behaviour may be shaped by evolutionary influences, 'genetic orientations' that are in turn modified (but never wholly supplanted) by social and cultural influences ('this is no longer a dismissible minority view') (Love 6).

If, therefore, the social and cultural is influenced by the evolutionary, and if (as Dutton has provocatively argued) art follows a similarly instinctive path (13-19), there is an obvious explanation for the intense and disorientating moment of recognition that Kerans feels when he finds himself stood before 'one of Max Ernst's self-devouring phantasmagoric jungles', screaming silently 'like the sump of some insane unconscious' (29).

For a few moments Kerans stared quietly at the dim yellow annulus of Ernst's sun glowering through the exotic vegetation, a curious feeling of

memory and recognition signalling through his brain. Far more potent than the Beethoven, the image of the archaic sun burned against his mind, illuminating the fleeting shadows that darted fitfully through its profoundest depths. (29)

This is not simply to blur the boundary between humankind and animal, but to insist that a human is and remains an animal, still alert to what Wilson calls 'its old capacities, its channelled quickness' (101). That insistence on the biological roots of our behaviour 'fatally undermines the idea of human dominion over the Earth' (Baker 20). Indeed, the idea—that construction—is itself a fatal defect. As Ballard wrote of the millions swept to their deaths in *The Wind from Nowhere*:

They were helpless victims of a deep-rooted optimism about their right to survive, their dominance of the natural order which would guarantee them against everything but their own folly. (120)

But whilst Ballard insists on the animal in human nature—in the human as a part of nature—this does not offer any easy path 'back to nature', nor any sentimental alignment with humankind's fellow animals. On the contrary, Ballard's narrative simply discloses long buried antipathies, atavistic and innate fears as persistent as the human dislike of the snake (see Love 102-3). Looking up at the 'ancient impassive faces' of the iguanas and basilisks that have 'taken over the city', Kerans realises that 'once again they were the dominant fear of life' (18). More:

Kerans could understand the curious fear they roused, re-kindling archaic memories of the terrifying jungles of the Paleocene, when the reptiles had gone down before the emergent mammals, and sense the implacable hatred one zoological class feels towards another that usurps it. (18)

In this 'nightmare world of competing organic forms' (19), there is a shared, a growing realisation that humankind is, as a species, now poorly equipped to cope. As Ballard noted in *The Wind from Nowhere*:

On the whole, people had shown less resourcefulness and flexibility, less foresight, than a wild bird or animal would. Their basic survival instincts had been so dulled, so overlaid by mechanisms designed to serve secondary appetites, that they were totally unable to protect themselves. (120)

In *The Drowned World* he goes further. As Bodkin remarks, 'the few complex organisms which have managed to retain a foothold unchanged on the slope look distinctly anomalous' (42), humankind included. Simpler and more ancient organisms may find a fit, but 'a biological process isn't completely reversible' (42). 'If we return to the jungle', Bodkin wryly remarks, 'we'll dress for dinner' (42).

But what next? Some defy the logic of their dreams. Even as Bodkin argues that 'we are being plunged back into the past, uncovering the ancient taboos and drives that have been dormant for epochs' (43-44), he resists the logic of his own argument: 'if we let these buried phantoms master us as they re-appear we'll be swept back helplessly in the flood-tide like pieces of flotsam' (44-45). Others accept the logic of this 'total reorientation of the personality' (44), Kerans among them. Perhaps they see in it a shift towards what Stephenson calls 'an absolute, authentic being', 'an ontological Eden' (qtd in Baker 16). But as Ballard elsewhere remarked, his characters recognise that 'the uterine sea around them, the dark womb of the ocean mother, is as much the graveyard of their own individuality as it is the source of their lives' (*User's Guide* 199).

So, drawn by the sun, Kerans heads south, towards continuous storms and rising temperatures. There in the 'phantasmagoric forest' of Ernst's imagination (169), he finds another member of his survey team, Hardman, who is now 'no more than a resurrected corpse, without food or equipment' (171), and all but blinded by corneal cancers; and yet 'as long as his eyes were strong enough to sense the distant signals transmitted by the sun, and as long as the iguanas failed to scent him, Hardman would move forward' (173). So, too, Kerans will move on, knowing that 'his own life might not long survive the massive unbroken jungles to the south' (174). 'All is well', he scratches on the wall of a ruined building, 'sure that no-one would ever read the message' (175).

So he left the lagoon and entered the jungle again, within a few days was completely lost, followed the lagoons southwards through the increasing rain and heat, attacked by alligators and giant bats, a second Adam searching for the forgotten paradises of the reborn sun. (175)

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What, then, are we to make of Ballard's early and undeniably original contribution to 'cli-fi'? As Clarke concludes, 'his nightmare vision of abandoned buildings rising from steamy floodplains transcends literature and is now an iconic signifier of global warming itself' (20). But the relationship is nevertheless a complicated one. Ballard's tale of what he insisted was a form of 'psychic fulfillment' (Pringle) is a challenge to the traditions of both the disaster novel and the dystopia (Baker 12). In *The Drowned World*, as Baker notes, Ballard produces a radical imaginary that 'explores the deep implications of time, space, psychology and evolutionary biology in order to dismantle anthropocentric narratives and, in turn, open up alternative ways of experiencing, and conceiving of, contemporary human subjectivity' (Baker 13). Arguably, this is its limitation: so complete a transformation leaves no room for a detailed social or economic

critique. Pointed comparisons can be made with Turner's *The Sea and Summer*, a supremely assured but also subtle novel underpinned by its understanding not only of climate change, but of humankind's difficulty in coming to terms with it. This is a novel that understands both the knotty geopolitical problem of creating effective climate change policies, and the socioeconomic impact of climate change, and its prescience is simply underlined by the difficulties the international community has since had in generating a consensus.

This is, perhaps, to return to the question of what we want 'cli-fi' to mean. If it is by definition 'overtly political', like Daniel Krumb's recent novel about climate change activists, *From Here* (2012) (Evanjie), then *The Drowned World* is itself maladapted, its message obscure, its characters often strikingly passive. But this is not the only way in which to interpret the genre. This paper opened with Nathaniel Rich's novel, with its front cover illustration of a sinking New York. Although recent—or perhaps because recent—his novel does not mention climate change once, not only because Rich considers it is a 'foregone conclusion', but because he believes that the phrase is cliché; his focus is, rather, on 'the modern condition' (Evanjie). Perhaps the same can be said of *The Drowned World*, a novel which is both radical and provocative precisely because it steps outside the considerations that shape (say) *The Sea and Summer*. Rising waters may be resisted, but not when human nature is itself in question.

'Have you ever worried that you might be too prescient?' an interviewer asked Ballard in 2006, late in his life (Elborough 5). Ballard demurred; but the honest answer is that, in deep and disquieting ways, his novels both anticipate the current interest in 'cli-fi', and help shape its terms. For Ballard, 'cli-fi' is not simply another excuse to imagine the end of the world. In *The Drowned World*, it provides him with the opportunity to probe the very Ballardian contrast between the people we are and, as Ballard put it, 'the civilized human beings we imagine ourselves to be' (Elborough 5); to (re)consider the link between biological and psychological, and to ask whether our sense of self—and of self as independent, sovereign, irrevocable—is itself a construction, and a temporary one. As Foucault observed, 'man is an invention of recent date ... and one perhaps nearing an end' (387). But as Kerans merges with the jungle, now just one animal amongst many, the still more terrible possibility is that, in constructing a separate sense of self, we have also laid the basis for an entirely destructive attitude towards the environment we so systematically exploit and disturb. As Ballard later wrote, 'I would guess that from man's first inkling of this planet as a single entity existing independently of himself came the determination to bring about its destruction' (*User's Guide* 208).

Is this, therefore, the inevitable and unavoidable fate of humankind? Is the determination to bring about the destruction of our own habitat itself rooted in

our evolutionary inheritance? Or is it (as I have suggested) a construction, susceptible (like climate change itself) to mitigation and adaptation? Ever mindful of the power of the fantasies and dreams 'latent in the unconscious mind' (*User's Guide* 208), Ballard himself wavered between the two arguments, as his highly suggestive and often disturbing fiction suggests. But in the final analysis, he inclined to optimism. The 'catastrophe story', he wrote, as an author 'who has produced a substantial number of cataclysmic stories', 'represents a constructive and positive act by the imagination' (*User's Guide* 208):

It is the inflexibility of this huge reductive machine we call reality that provokes infant and madman alike, and in the cataclysm story the science fiction writer joins company with them, using his imagination to describe the infinite alternatives to reality which nature itself has proved incapable of inventing. This celebration of life is at the heart of science fiction. (*User's Guide* 209)

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