

# Dystopiac Climate Change Fiction: Two Examples

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## **Abstract**

*A recent development in the trajectory of science fiction is the emergence of the climate change novels in the second half of the twentieth century. The present research attempts to explore this type of fiction, its tools, strategies and above all its themes and objectives. The novels chosen here as examples representing this phenomenon of climate change are J.G. Ballard's *The Drowned World* (1962) and James Bradley's *Clade* (2015). Although the two writers belong to different countries and continents (Ballard being British and Bradley Australian), their novels show many common points in their perspectives, apprehensions and serious messages about the future of the planet. A significant finding the two novels elaborate is that climate change is the most powerful challenge humans have faced throughout their long existence in this world. Due to its urgency and great significance, it is expected that a long series of climate change fiction will be published and will tackle different manifestations of this topic.*

**Key words:** *climate fiction , The Drowned World, Clade, Ballard, Bradley, dystopia*

The firmament is blue forever, and the Earth Will long stand firm and bloom in spring But, man, how long will you live? (Weisman 3)

## **1.1. Introduction: Climate Change Fiction:**

Climate change is a serious and persistent problem that all countries face in different parts of the world. It began to be felt by people and institutions in the second half of the twentieth century with the discovery of the ozone layer hole over the Antarctic in 1985 by Joe Forman, Brian Gardiner and Jonathan Shanklin. This date is significant as it signals the worldwide worries and apprehensions about the future of the planet and humankind. In fact this is a watershed experience for people and countries and from that date onwards, there have been serious efforts exerted by civil activists, social organizations and government institutions to study this serious phenomenon and its terrible repercussions on the future of the planet. The questions raised by all those concerned are related to the reasons that led to such a dangerous situation. Scientists find that these unexpected changes in the cosmic order are of two types: the first is the natural change that has happened in different times. The other is the main point here: the process of erosion of the ozone which is attributed to industrialization and human activities such as deforestation and the emission of gases and other pollutants. Many gatherings and organizations see that all what happened in nature is attributed to people who think only of the here and now. One scholar gives the following account about the subversive actions of people and institutions:

Humans are undoubtedly the most dominant species the Earth has ever known. In just a few thousand years we have swallowed up more than a third of the planet's land for our cities, farmland and pastures. By some estimates we now commandeer 40 percent of all its productivity. And we're leaving quite a mess behind: ploughed-up prairies, razed forests, drained aquifers, nuclear wastes, chemical pollution, invasive species, mass extinction and now the looming specter of climate change. (Foster 49)

Initially there is a need to refer other novelists who have written this type of fiction from different angles. In an interview held with the contemporary Canadian novelist Margaret Atwood, Tabitha Whiting quotes her words concerning the climate change and its devastating impacts, "There will be a bill: the cost will be high, not only in money but in human lives. The laws of chemistry and physics are unrelenting, and they don't give second chances. In fact, that bill is already coming due" (Whiting 2019) In her *Maddaddam* trilogy (2013) she shows

life under the climate change and the terrible impacts on nature such as floods, radiation, storms, droughts...etcetera.

Ballard's *The Drowned World* paints a totally bleak picture of the planet, and emphasis will be laid on this novel and its author since it foregrounds the essence of the predicament in which people all over the world are trying to come to terms with. There is almost a unanimous consent among scholars in the field of climatology that the current crisis of the climate change is a by-product of human selfishness and greed:

Man has been destroying this great planet for thousands of years, but only the last century has the destruction been so massive and so rapid [...]. Man has created newer and more modern equipment to systematically destroy our natural resources a hundred times more efficiently and faster than before.(Licauco108).

In fact, man's ceaseless intervention in the underlying laws and conventions regulating the planet takes different shapes and forms. The fierce competition between great powers exacerbates the deterioration of the ecosystem through the radioactive pollutants have become " a major concern since the first atomic bomb was dropped on Hiroshima, Japan, in 1945"(Hollar 9).

Amidst this growing sense of frustration, we heard the shocking cry of protest by the author and environmentalist, Bill McKibben when he complained in 1966 "We're not going to stop climate change. It's too late for that"(Halstead 7). This despondent view of what awaits humanity of catastrophic situations and ordeals is enhanced by the Foucauldian assumption that human beings are the only creatures that are capable of being conscious of being" thrown into the world. This does not alter the fact that animals, plants, rocks,species, oceans and the like also are in such a state."(Gorke, 266)

Albert Arnold Al Gore, the US Vice President during the Clinton administration, views the global issue with utmost seriousness.As he puts it in his book," we are in a collision course with the globe"(12).The gravity of this line of thinking can be disambiguated through a passing reference to what human beings are doing nowadays. Scientists stress some fundamental facts about the universe and its invariable laws. For instance, the geological time, we are told, is the " immense span of time that has elapsed since Earth formed—almost 4.5.billion years ago—to recent time"(Barnes-Svarney and Vaney 10).This infinitely long time of existence of the earth is now subject to man's undermining endeavors which would put an end to all that within a very limited time span, or as Sir Isaac Newton predicted " the end of the world (will be) in 2060"(Redwine 34).

Ballard's novel chooses one aspect of the planet as its central domain : the repercussions of global warming. Its date of publication (1962) is significant as it refers to the relatively short time separating our position from its publication, but the drastic changes preoccupy the interests and apprehensions of experts and specialists in the field. Ever since its publication, there have been great changes in the ecosystem that attracted the attention and concerns of people around the world and international organizations. In the last five decades or so, many conferences and meetings have been systematically held in different parts of the world to discuss the status quo of the planet and the most cogent means of grappling with it. Scientists have raised serious warnings about the grave consequences of climate change. The problem that aggravates the situation is related to the indifferent attitudes of some powerful countries in the world. The mounting fear possessing people rests in the accelerating height of sea level which actually threatens the future of people all over the world:

In a short period of time it is likely to cause a lot of damage. According to one report,150 million people, three times more than now, could be exposed to 1 in 100 year flooding even due to higher storm surges caused by that much sea level rise(Murphy,Gordoni and McKion 67)

If *The Drowned World* shows the defeat of science before the overwhelming powers of nature, Bradley's *Clade* runs in the same direction. Adam, the main character here, is also a scientist whose task centers on observing and checking the changes taking place in the Antarctica. Despite the baffling circumstances and imminent danger, Adam is not fully engrossed with public life. He devotes some time to his family so that by the end of the novel he becomes a grandfather. This is one of the striking differences between these two climate change novels.Ballard's scientist Kerans surrenders to despair and suicidal drives, while Adam ,as suggested by his name,acts as the preserver of life. In other words, the duality of life and death forms this subtle difference between the two writers and their novels.Ballard's novel has emphasized "human impermanence"(Moore 29) as one of Ballard's critics suggests . It is the gloomy and pessimistic world without humans that keeps most readers away from this writer's work. In many cases readers keep away from suffocating worlds like those in Ballard's work. This explains the reason behind television's great success in attracting the attention of viewers much more than readers of fiction .All this is attributed to television as a medium of"for entertainment" (Rees and Eijck282)

### 1.2. Cli Fi and the Climate Change:

As expected, this type of climate change fiction, which is often labeled as cli-fi, is distinguished by certain common features. The first element is its ability to transcend the local or regional as it aspires to attain the universal. Indeed, it explores the universal issues related to the present and future of the planet. The global warming is not merely a transient phenomenon that human beings can overlook and keep on practicing their daily activities and concerns. As George Anderson points out, the climate fiction can be seen as "a laboratory for the creation and testing of new sustainable forms of society and individual practices" (1). Indeed, it is like that since this fiction heralds and addresses certain practices and views of life and society which are the inevitable outcomes of the malpractices and greed of people and countries.

Should the author of cli fi be knowledgeable in science per se in order to give a plausible and convincing work? The answer to this question is that it is not a precondition for writing this type of fiction to be a scientist in the exact sense of the word. What matters most is the imaginative faculty that enables the writer to start from the fanciful and end in the factual. Joanna Russ finds that such writers "ought at least be up to the level of New York Times Sunday science page" (200). This view is more or less valid, as the practitioner of science fiction is not necessarily expected to be an expert in the field of science. Readers expect that such a writer should be skillful enough to create a compromise or synthesis between science and literature. Science fiction combines wild and uncanny imagination in literature and the "technological world unfolding around them, banners above the editorials, proclaimed "Read it Today. Live it Tomorrow" (Bould and Sherryl (41). The writer has to give priority to his/ her field of interest (imagination and reliance on the beauty and wonder of the language used). This is quite obvious in Bradley's novel rather than Ballard's. If the "contamination between scientific precision and imaginative science fiction" (Frango-Polous 76) serves as a yardstick for appreciating and judging the successful cli fi, then Bradley manages in his *Clade* to attain that target.

Apart from the great appeal of this fiction especially in its thrilling and moving situations, this genre has another equally serious aspect, that is, a firm ethical commitment. The Australian novelist, poet, critic and editor James Bradley (b.1967) calls this type of fiction as "super-fine-fiction". He sees this climate change as essentially political since the possible solution to this urgent situation is left to the influential leaders of the globe to enforce the necessary measures for ending this predicament or at least mitigating it. He contends, "serious writing refuses definition, refuses control, and that in itself is a threat to many" (cit. in Young 47).

Another striking feature of cli-fi writing (the term was coined by the activist Dan Bloomin, 2008 (Baumbach and Neumann 99) is that its writers are usually from countries where the sense of place plays a very important role. There are many countries in different parts of the world where the distance between the land and water or ice is nearly negligible--- Canada, U.S.A., Finland, Australia, Britain, Japan... etc. So writing this type of fiction for writers from such countries is a must and national responsibility that has to be implemented simply because of "extreme vulnerability to the likely effects of global warming" (Milner & Burgmann 72). What brings writers from different countries together is the awareness of the seriousness and gravity of the global situation and the universal disasters lurking in their future. Once more James Bradley's insights are helpful in shedding light on this thorny problem:

You can't write about climate change without writing about loss, whether of species or abundance or simply of possibility. That loss was very much on my mind when I wrote the book (*Clade*), because I have children, and I'm carefully aware that the world they will live in will be a poorer—and probably less pleasant world [...]. As a parent that makes me terribly sad but as a human being it makes me angry because it's really a form of theft—our generation and the generation before us have stolen them and the planet's future. (Bradley 2017.)

Indeed, there is a streak of grief that permeates Bradley's creative works and critical judgments. In his review of *Sixty Lights* (2004) in the Sydney Morning Herald one clearly notices the same permanent touch:

The images it gives us, sliced out of time and carved in light, are possessed of a strange duality, capturing what is lost and preserving it even as they are suffused with the sadness of the moment's passing. It reminds us of the ways in which those things that make us most human—love, story, forgiveness... are themselves inseparable from our own mortality. (Spurr and Cameron 180)

Obviously Bradley as the advocate of science fiction and the vast potentialities it could provide shows that it has its own limits when compared to fantasy works. Science fiction to which Bradley's novels belong is rooted "in the world of everyday experience *extended* (italics added), while fantasy takes place in a world in which the rules of everyday experience do not apply" (Gunn 76-77). This point can be felt in reading any page of his *Clade* where the principle of cause and effect is invariably at work. This contrasts vividly with Ballard's

depiction of his terrible winds or surging waters which are representative examples of fantasy, albeit not completely cut off from the lived reality.

### 1.3. J.G.Ballard's Works: The Shift from Science Fiction to Non-Realism:

The apocalyptic novels of J.G.Ballard (1930-2009) culminate a creative career marked by diversity and continuous developments in his art and themes. J.G.Ballard's narrative revolves around many urgent problems in contemporary world culture and life, such as urban technology, scientific revolution and complicated modes of thinking and living.

His childhood experiences are recalled in his semi-biographical book, *The Empire of the Sun* (1984) in which events are derived from his personal experiences in what used to be a prison of Japanese POWs. In fact, *The Drowned World* does not veer very much from the essential line of his aforementioned work in that it mixes the experiential and imaginative elements. As the author admits :

On reflection it seems to me that the image of an immense half-submerged city overgrown by tropical vegetation which forms the centerpiece of *The Drowned World* is in some way a fusion of my childhood memories of Shanghai and those of my last 10 years in London. (Self, 2013: .n.p)

Actually his serious work is often associated with so-called catastrophic or apocalyptic novels: *The Wind from Nowhere* (1961); *The Drowned World* (1962); *Drought* (1964); and *The Crystal World* (1966). This series of novels which are thematically linked do not abide by the conceptions of science fiction. Rather they represent fantasy fiction in their deliberate violation of logic and plausibility. He also wrote a number of other novels that explore other aspects of contemporary life in Europe or America. The present article will concentrate on one novel of the series of apocalyptic novels. It is *The Drowned World*. In fact, the question of apocalypses has attracted the attention of critics like Jacques Derrida as seen in his books, *No Apocalypse, Not Now* (1964), *On a Newly Arisen Apocalyptic Tone in Philosophy* (1992) as well as Frank Kermode [...] in his *The Sense of an Ending* (2000). Both specify the capacity of the term for unveiling truth. (Lyons, 2013: 4)

In scientific arguments about the ephemeral presence of the planet and humankind, one can easily notice two distinct polar views. The first stresses the scientific interpretation which saw the end of the planet as a deterministic and unstoppable phenomenon that happens by its own accord:

The planet we call Earth will once again grow too hot or too cold or too dry or too wet for human beings to survive here. We have come to call the moment when human life on earth dies, The End of the World. (Littlejohn, 2013: 331)

The second which is the focus of interest in this study is human activities and persistent search for more benefits and endless interests. This has led to a state of attrition and exhaustion of all natural elements, including air quality, scarcity of food and uncontrollable radiation and their far-reaching effects on health and life span.

Having established his reputation as a science fiction writer, Ballard shifted to realism or sometimes works derived from media or the cinema. His *The Atrocity Exhibition* (1970) has a striking title in its daring representation of reality in all its shocking details such as the lives and deaths or murders of actual people like President John F. Kennedy, Marilyn Monroe, James Dean, Ronald Reagan and so on. The narrative is deliberately fragmented so as to comment on the painful and violent daily reality. William Burroughs, the American science fiction writer, wrote the preface to the novel in which he states "The line between inner and outer landscapes is breaking down. Earthquakes can result from seismic upheavals within the human mind" (Ballard, 1970: I).

This curious mixture between the fanciful and shockingly real holds true to the naming of the main character Talbot who assumes different variations of his real name (Traven, Travis, Talbot). implying that in every phase of human life and experience one unknowingly assumes a new shape. This duality of appearance and essence is a recurrent topic here. The typically Eliotesque topics are present as well as "the emotional and spiritual sterility of contemporary western culture" (Stephenson, 1991: 64)

The media has engaged the forefront in *The Atrocity Exhibition*, *Crash* (1973) hinging on exploring the sexual perversion called 'symphorophilia', that is, the obsession of some people with catastrophic situations such as car accidents in order to get sexual arousals. If Ballard's novel talked about the serious problems of death caused by cars, it would have won a great popularity and appreciation. But, as it is, this novel is less popular for thematic reasons. The adaptation of the novel to the white screen in 1986 by David Cronenberg under the title, 'Nightmare Angel', proved to be sheer failure. Although Ballard is a post-modernist whose intellectual and aesthetic

orientation is different from the main stream, his novel chooses a way of its own and does not score the desired success.

After his strange exhibitionism and bizarre car crash, Ballard brings his readers to an equally unusual setting—a luxurious building whose residents have sharp class differences. This situation causes much discontent and grudge. The characters surrender to unconscious drives that eventually turn their life into inferno. From the first page of the novel, the reader feels that the book has actually started before the actual start, "Now that everything had turned to normal, he was surprised that there had been the obvious beginning, no point beyond which their lives had moved into a clearly more sinister dimension." (Ballard, 1975:7)

The common theme the three novels discussed here share is that there is something wrong with the people, objects, scenes and feelings expressed. If Ballard's fictional world is described as reflecting some sense of "political and moral nihilism" as one of his scholars asserts (Deville, 1998:7), there is evidence in those realistic and non-realistic fictions. The same holds true for the climate change novels whose depressing tone attests to the validity of the above-mentioned judgment.

#### 4. James Bradley's Initial Works:

The Australian novelist James Bradley (b.1963) writes his own type of fiction which draws upon the Australian environment and history. By implication, one can state that he started as a realist, depicting many aspects of Australian life, history and culture. Evolving into his climate change novels. In his first novel, *Wrack* (1997) the archeologist, David Norfolk, spends his time in search of a Portuguese ship that was sunk in the sixteenth century. The interest lies in the long process of search, and the many coincidences and unexpected situations that David encounters. Instead of reaching the ship, he finds a corpse of a man called Kurt Seligman. This discovery actually distracts David from his original plan and actually turns the novel into a book full of suspense, wonder and thrill.

*The Deep Field* (1999) remains, according to the Bradley, "my favourite of the three novels I've published so far". It is not different from the first novel in that the author creates a story of suspense about the photographer Anna Frasier who loses her brother in Hong Kong. Returning to Sydney, she starts studying fossilized cells. She gets acquainted with a blind paleontologist called Seth Lmarque and his sister, the solicitor Rachel. This new relationship distracts her for some time but her thoughts are always with her twin brother, a point that drives her to leave for Hong Kong.

*The Resurrectionist* (2006) is a novel where "James Bradley appears to have broken free of his country's past" (de Grot, 2010:95). Indeed the author shifts to a totally different environment: London in the 19<sup>th</sup> century where the world of crime, robberies. And dealing with dead bodies shocks Gabriel Swift, the anatomy student. Of all the horrifying situations and experiences, Swift is attracted to the resurrectionist of the title, Lucan, whose macabre world brings to mind some of Charles Dickens' memorable characters and their propensities to evil and crime.

Thus for nearly a decade Bradley has distinguished himself as a writer of adventures, mystery, search for some hidden or lost objects or people. However, this line of writing would not give him the renown and prestige he dreamt of. His *Clade* (2015) initiates a new line of writing in Bradley's creative career. As it is the main point in this article along with Ballard's *The Drowned World*, the review of literature will now refer to his other science fiction novels.

Along with *Clade* and *The Silent Invasion*, *Ghost Species* (2020) is the third novel devoted to climate change. Obviously writing about ecosystem troubles and dangers in the form of science fiction usually follows a long process of experimenting with other types of realistic or historical fiction. This is a highly speculative novel which brings some echoes of Beckettian fiction, especially in his trilogy (*Molloy*; *Malone Dies* and *The Unnamable*, 1951). Basically it addresses young adult readers. In the initial paragraph, the author assumes the voice of the girl (Callie) who was not affected by the fungi called Change. She and her sister Grace have the power to withstand this weeping Change and its wide-ranging impacts. The invasion of the title is related to the terrible fungi under whose spell people are quite helpless, with the exception of Callie and her sister. This is a highly psychological novel where the flow of ideas and impressions is given free rein:

When I look back it sometimes seems as if it all happened to somebody else, which in a sense it did; I left behind the me that was all there, the me that did all those things, long ago. Perhaps that other self is still out there, somewhere across that impossible distance of space and time, perhaps she even thinks of me, here, on the

white beach, under a sky so full of stars that even the night shines, or perhaps she is gone, swept away like all the others. (1)

Now the scientist, Kate Larkin, undertaking the experiment she finds herself attracted to this archetypal Eve. This of course runs counter to the prerequisites that a scientist should keep sentiments at bay, in particular sentiments towards an artificial creature. The novel pursues the main assumptions of William Golding's feat, *The Inheritors* (1955) that looks at the Neandertals from an ethical and humanitarian perspective, rather than the utilitarian one discussed here. Like the main character in the novel appears to hold higher principles and respect for family life that is unparalleled among the other homo sapiens.

The question that this novel raises is related to the paradox underlying its structure. Is the homo sapiens no longer reliable or is its renowned rationality and intelligence prone to destroying and annihilating the ecosystem? Is the presence of Eve in the novel the outcome of disinterested or utilitarian purposes? Above all, who are the ghost species of the title, the creators or created? These are questions one cannot answer with certainty, given the bleak picture of the universe as a result of man's self-inflicted devastation.

## 2. The Main Argument:

### 2.1. The Drowned World and Apocalyptic Vision

The epigraph that initiates *The Drowned World* reverses normal logic; "In a completely sane world, madness is the only freedom" (p.5). The implication is that the novel which the reader is about to read will be totally different from what is found in actual life. The reader is prepared by these words about embarking on a world that only by means of great imagination can one its people, creatures and unnatural habitat be perceived. Moreover, what appears irrational on the surface (the drowned world of the novel) will be the essence at a certain time in man's bleak future history.

Ballard's current novel is part of the catastrophe quartet that betrays some common features. All of the four novels *The Wind from Nowhere* (1961); *The Drowned World* (1962); *Drought* (1964); and *The Crystal World* (1966). deal with universal disasters that play havoc in the lives of people on a global scale. They show how nature represented by the elements such as wind, water, heat or drought, can restore man to his former status as a weak and bewildered creature, who is unable to grasp, let alone cope with, the wrathful forces of nature. In all of these four novels, the reader is made keenly aware of nature's demolishing role in human life which is the inevitable outcome of human inconsiderate actions and rash conduct. If the purpose of art, as the Russian formalist Victor Shklovsky asserts, is to disrupt the 'habitation' and 'algebraization' of perceived objects, and "to re-automatize, to dis-habituate, to discomfort, to defamiliarize" (Thomas, 2013:169), then Ballard's work fulfills this laudable task successfully. For instance, *The Wind from Nowhere* (1961) shows the irresistible powers of nature and the physical weaknesses of humans in their frantic search for a resort in the sewages and tunnels. Likewise, *Drought* or *The Burning World* (1964) emphasizes man's vulnerability before the wild forces of nature. Doctor Edward Anderson goes to the river Port of Mattarre, Republic of Cameron, in search of drug for the leprosy that is rampant in the area. This novel pursues the same line of argument about the allurements of the place that keeps the medical doctor in *The Crystal World*. Also the biologist Kerans in *The Drowned World* is attracted in the same way to the south of the globe for all its impending possibility of death.

For all the ostensibly irrational and even surrealistic sides of these novels and their harrowing images, the positive point they all share is that man's presence in this world is subject to unpredictable surprises and events, many of them are his own doing. Moreover, man's capitalizing on science as the sole solution to all his problems is not always sound as the novel argues. There needs to be some space, no matter how meager it might be, devoted to eschatology, a point that will be shown in the following discussion.

*The Drowned World* is a novel of the ecosystem par excellence. The environment of what "had once been Berlin, Paris or London" (Ballard, 1962:9) receives great emphasis. The writer states the radical changes in the climate and its inevitable impacts on humans, plants and animals, "pockets of air would heat rapidly, then explode upwards like escaping balloons, leaving behind them a sudden deteriorating vacuum" (8). It is not only space that has undergone irredeemable changes as the author clarifies the changeable environment in a quasi-scientific jargon:

The intolerable heat of the atmosphere is shown through the metaphors used throughout the author's narrative: "The solar disc was no longer a well-defined sphere, but a wide-expanding ellipse that fanned out across the eastern horizon like a collapsed fire-ball. (6)

The average temperature varies between one hundred thirty or forty centigrade, which is why fish is not mentioned in the novel. The inference is that sea species it has been extinct for a long time. Therefore, the author has replaced it by reptiles, especially alligators and iguanas. Other animals and insects have also undergone an evolution, transformation and adaptation: giant bats, "60-foot high plants"(18); "giant anopheles mosquito, the size of a dragon"(10).

The great heat of the sun is enough to burn the skin of the animals in the region, The writer must have been informed of the reactions of people and other beings under such uncommon weather conditions:

Three feet below the surface a small albino python swam past, searching for a way out of the enclosure [...]. Big Caesar (crocodile), his great legs clamped to the narrow sill of the boom, kicked savagely at the amphibian, which snapped and banged at the spears and boathooks. Over thirty feet long, it was well over ninety years old, and measured six or seven feet in chest diameter. (108)

However, the effects of climate change on humans are the most visible: physiological and psychological. There is a sense that life in the future will be in a state of regression and continuous decline, as evidenced in the reactions and attitudes of the team in charge of observing the continuous biological changes taking place. The protagonist, Robert Kerans typifies these mutations and actually reiterates all that in his conversations with others or in his ruminations. Kerans is a glaring example of how the climate changes plays a destructive role in the psychological and physiology of the individual. We learn that:

Although he was only forty, Kerans' beard had been turned white by the radio-fluorine in the water but his bleached crew-cut hair and deep amber tan made him appear at least ten years younger. A chronic lack of appetite, and the new malaria, had shrunk the dry leathery skin under his cheekbones, emphasizing the ascetic cast of his face. (11)

Kerans' case is not rare: rather it is typical as seen through the physical description of the last survivors, "the people still living in the sinking cities were either psychopaths or suffering from malnutrition and radiation sickness"(12). Another factor is "The continuous heat and massive doses of antibiotics drained all energy from them"(23). Kerans seeks to find some explanation for his declining state and finds that "the genealogical tree of mankind was systematically pruning itself, apparently moving backwards in time.(24) Needless to add, the scientific data is not the author's imaginings. It is possible he was in touch with experts in the field and got reliable information concerning the climate change and its effects on human beings and other creatures and inanimate objects. Indeed this is a rudimentary task for any writer embarking on such an ambitious and demanding enterprise.

The chapter carrying the very expressive title, "Descent into Deep Time", accompanies the reader in a journey across time when there are radical changes in the natural elements such as the sun and air. Ballard's graphic description is pictorial and memorable:

Later that night as Kerans lay asleep in his bunk at testing station, the dark water of the lagoon outside drifting through the drowned city, the first of the dreams came to him. He had left his cabin and walked out on to the deck, looking down over the rail at the black luminous disc of the lagoon. Dense palls of opaque gas swirled across the sky only a few hundred feet, through which he could just discern the faint glimmering outline of a gigantic sun. Booming distantly, it sent dull glows pulsing across the lagoon [...](77)

The members of the team along with Beatrice Dahl suffer intensely as they are subjected to endless dreams or, to be more precise, nightmares. Indeed these dreams annoy them endlessly. Kerans' recurring dreams indicate that the static and clumsy mode of life is painful, and the past becomes a haunting and worrying image. It is inevitable since the future is something they do not want to think of; the present is a kind of long nightmare from whose trammels they cannot release themselves. The destruction of man's normal life is self-inflicted. Hence the great sense of remorse at losing one's inner peace and normal life. Here is a representation of Kerans' endless suffering:

Several times Kerans paused and tried to shrug off the chaos that persisted in his ears, uneasily wondering what was the real identity of his new pursuers. His unconscious was rapidly becoming well-stocked pantheon of tutelary phobias and obsessions, homing on to his already overburdened psyche like the telepaths. (78)

As the author is talking about the unconscious Jungian archetypes and their vital role in human life. Bodkin, Kerans' colleague, argues in almost the same vein, "an ancient organic memory millions of years old"(81).

Although, the author himself sheds light on this recurrent phenomenon in the lives of these lonely and embittered people, critical studies and academic researchers have shown the role of the unconscious in the uneventful life of those stranded in the two Arctic poles and their subsequent actions:

the metamorphosis of the landscape forces a radical alteration in the thoughts and behavior patterns of human characters. Kerans notes that his own personality has been altered out of necessity and that old categories of thought would be an encumbrance (McAulay, 2008: 32)

Technically speaking, the static situation of the scientific team will dispel when a new team arrives. Strangman, the albino piratical freebooter, with his gang of negroes, is the reason. Kerans has engaged our attention, because he is the protagonist of the novel that stands for what is scientific and rational. He preserves a great human sense, irrespective of the overwhelming state of chaos and selfishness where he lives. His attitude toward the only woman in the book, Beatrice, is characteristic:

(He) caught a brief glimpse through the heat waves of Beatrice standing at her balcony rail. When he waved, however, she characteristically turned away without responding:

"One of her moody days, Doctor? Sergeant Macready from the guard cubicle, a trace of humor releasing his beak-like face. She's a strange one, all right".

Kerans shrugged. "These tough bachelor girls, you know, Sergeant. If you're not careful, they frighten the wits out of you. I have been trying to persuade her to pick up and come with us. With a little luck I think she will." (33)

In other words, Kerans is the model of the real scientist who maintains his sense of dignity and respect under very dehumanizing and challenging circumstances.

With Strangman's appearance, the structure of the novel completes its cycle because he represents the other aspect of the book: aggressiveness, greed, lust and indiscriminate force. As the antagonist and through him another interest of the novel is shown. Also, Strangman is reminiscent of Conrad's Kurtz in *Heart of Darkness* (1899) and his memorable way of dealing with his Congolese followers. Indeed, Ballard as a writer has been classified as slotting "somewhere between Joseph Conrad and William Burroughs. His early protagonists find their own internal hearts of darkness in worlds mapped by ecological disasters" (Brace, 2006: n.p.). At any rate, the Conradian Kurtz has his moment of revelation and grace before his death when he utters his memorable words of regret and self-blame, "The horror, the horror". The present Strangman persists in his looting and material interests and in return he wins the respect of authorities in his attempt to drain the lagoon, although he is actually catering to his own selfish interests.

The presence of Strangman and his followers adds more action and a new drive to the novel. The narrative voice in the novel refers to the change introduced by Strangman in the course of events, "the arrival of this strong white-suited figure, momentarily, disconcerted Kerans" (93). His albino face, white clothes and unpredictable actions, as well as his unmistakable responses, force the reader to shift attention to this newcomer, described "his handsome saturnine face regarding them with a mixture of suspicion and amused contempt" (97). The author adds further details forcing the reader to recognize him and his actions:

Whatever his real identity, Strangman was no ordinary freebooter. A curious air of menace pervaded the depot ship, its crew and their maker. Strangman in particular with his white sailing face, its cruel lines sharpening like white arrows when he grinned, disturbed Kerans. (100)

Strangman's presence and aspirations run counter to that assigned to Kerans and Bodkin. He is not concerned with the general cause of people and their safety or security. His task is related to deep-rooted interest in vandalism, robbery and looting. Without speaking to each other Kerans and Strangman know they belong to totally different worlds:

Strangman and his crew wandering through the Equatorial lagoons and archipelagoes in pillaging the drowned cities, reclaiming the heavy specialized machinery such as electrical power generators and switch gear that had been perforce abandoned by the governments.. (97)

Evidently Strangman and his group represent the foil to the Kerans-Bodkin-Hardman group who feel out of place and choose the fatal option (Kerans and Hardman)—south and its inevitable implication of death. This tragic fate brings to mind the steady impression that nearly all Ballard's main figures. They usually are:



antiheroes. They did not respond to the challenges of disaster by fighting back with pluck and courage[...]. They despaired they devolved, they gave up, they allowed themselves to be gobbled by the hostile universe, they accepted it, they even came to welcome it. (Spinrad, 1990: 187)

The main conflict in this novel is the sharp contrast between humans and intimidating nature. Ballard is concerned with showing the defeat of those intellectuals represented by Kerans. Strangman gains the material benefits and gratifies his whims. Apart from the characters and the difference among them in terms of morality or material benefits, the novel shows that all people pay a lot for the state of drowning enveloping everything. For example, childbirth has become a rare phenomenon. All types of diseases and malaria are wide-spread, while intolerable heat spreads everywhere. The situation is totally hopeless. However, amidst the prevalent baffling circumstances, people cannot live peacefully with each other. Kerans' description of Strangman is valid "the last few days have been insane here. It's difficult to describe Strangman---he's like a white devil out of a voodoo culture." (174). Truly Kerans does not die but he is heading by his own free will to a place where death is certain. The tone of the passage describing his decisive move is imbued with a theological or, if you will, anthropological touch:

So he left the lagoon and entered the jungle again, within a few days was completely lost, following the lagoon, southward through the increasing rain and heat, attacked by alligators and giant bats, a second Adam searching for the forgotten paradises of the reborn Adam. (192)

As exemplified by the present Strangman, the novel shows that many people cannot rid themselves of their inherent evil even in the midst of rampant death and catastrophe. In contrast, there are those of Kerans' type who would not give up their fundamental human sense no matter the harsh circumstances they might encounter.

As the present reading of *The Drowned World* approaches its end, some basic points need highlighting. Despite its quasi-scientific terminology and explanation of the tragic end of the planet, the semi-religious side engages a certain space here. Strangman is undoubtedly the Devil incarnation whose appearance and acts succeed in either killing people (Bodkin), seducing the only woman in that place (Beatrice) or humiliating another man (Kerans) for the simple reason that Kerans is not his type. The narrative venue is emptied at last as each character heads to his destination. The reader is left to deduce any significance out of this mystifying and puzzling situation.

The dominance of water at the beginning of the world as narrated by theological texts, such as the Scriptures or the Qura'n is teleological here, in fact the beginning of the world is water. It precedes the creation of man as the Bible asserts, "In the beginning God created the heavens and the earth, Now the earth was formless and void, and darkness was over the surface of the deep. And the spirit of God was hovering over the surface of the water. (Genesis:1:2). Likewise, in Islamic eschatology, the argument runs parallel, "And his throne/dominion extends on the water—that He might manifest to you, which of you is best in action" (Qura'n, Sura 11, Ayat 7). The 'water' here might comprise all types of fluids and liquids without which all creation would be impossible. Water, in whatever forms and shapes it might take, is actually associated with the real beginning of the universe. So it is logical to infer that its apocalypse is inseparable from water either. The novel hints at the deluging state that will take place sooner or later. The religious explanation is presented directly in *The Crystal World*, a novel written after *The Drowned World*. Though given in a casual mode, the explanation keeps away from the scientific discourse and hints at the religious one. One character comments on the imminent end of the universe in a quasi-serious tone, "maybe it's the deliberate act of an outraged Providence, determined to sweep man and his pestilence from the surface of his once green earth" (55). Indeed, an important article on Ballard's *The Drowned World* derives its title from the question of man's rash and selfish acts of indiscrimination as it carries the apt title, "Nature Reclaims Her Own: J.G. Ballard's *The Drowned World*". It reminds us of Margaret Atwood's reference to the "bill" to be paid. Here the author Adrian Tate casts light on the novel's tendency to appeal to what is not local, "Ballard' fiction is universal and transcends the national level. He sensed that nations and nationalities were in a globalized context, steadily losing their relevance and preeminence" (2015). Indeed the British distinguished scientist Stephen Hawking predicted before his death in his article 'A Smooth Exit from Eternal Inflation' that "the world would end within less than 100 years" (Liang and Liang, 2019: 2)

It is not only the universal appeal that distinguishes *The Drowned World* but also the credibility and plausibility of Ballard's predictions in this novel. It is helpful to compare this novel with *Nineteen Eighty Four* (1949) by the British writer George Orwell (1903-1960). In that novel, Orwell predicts a world suffocating from totalitarianism and political tyranny in 1984. Such is the arbitrary authority of the ruling party in an unspecified communist country in the future time (1984) compared to the time of its composition (1948), that human beings will be under continuous and suffocating surveillance. Also the houses and hotels will be continuously watched by "Big Brother". Even language is subject to a brutal process of distortion so that the opposite meaning of the word becomes the norm. Indeed, the writer found it necessary to provide a glossary at the end showing the

words and their new denotations. However, with the advent of the year 1984 none of these predictions had come true. Just five years later, people's adamant will caused the Berlin Wall to fall and the world has witnessed an unprecedented time of détente. All what we read in *Nineteen Eighty Four* is now part of history and archive.

In sharp contrast, one can easily recognize the great authenticity of the novel's arguments and warnings. At the time of the writing and publication of *The Drowned World* (1962) the climate was not as hot or cold or stormy as it is in 2020.. At present the United Nations and its different agencies keep boosting their activities and conferences about climate change. Rallies and demonstrations of activists have become a common scene. The current controversies on the Paris Agreement (December 2015) to combat the climate changes are evidence that Ballard's predictions are part and parcel of reality. However, it has to be recalled that Ballard's Conradian sense of awe, surprise and concealed secrets give his work its distinct flavour and uniqueness or as Kate Sherrod (2012) puts it, "Ballard is a hypnotist. And he's inducing daydreams" (n.p.) Further one can add to that the curious mixture of the fascinating elements and intimidating elements remains Ballard's hallmark and privilege.

## 2.2. James Bradley's *Clade*: Subtle Balance between the Human and Non-Human:

Ballard's *The Drowned World*, as we have seen, hinges on the main premise that man's position in the cosmos has actually regressed and is on the verge of vanishing as felt through the overwhelming deluge that has submerged everything. James Bradley's *Clade* (2015) written after more than fifty years of the publication of the first novel, pursues the same line of cli fi albeit from a slightly different perspective. Indeed *Clade* replaces the sheer gloom of *The Drowned World* by a work that has its own distinction in terms of form and content. The form of this novel is striking if one takes into consideration the various poetic/artistic devices skillfully used in the novel. The aesthetic consideration of the novel is in fact complementary to its thematic significance. The theme of *Clade* pursues the same track we have encountered in *The Drowned World*. In the sense that there is a serious danger lurking in the way of people and the planet as a whole. So the novelty of Bradley's novel rests in the combination of a very important and an artistic mold capable of attracting the reader's attention up to the end of the novel. One of these is the intertextuality which plays a role here. The initial epigraph by the philosopher Heraclitus (535 BC-425 BC) is definitely indicative of the theme of the present novel as it states the evanescence of things, including the planet itself, "Everything flows and nothing abides". Epigraphs are common in modern writings, but Bradley chooses another quote from a Chinese poet to express the state of passion and longing in one of his characters. The poem is called "The River Merchant's Wife". Here is the quote that has attracted the admiration of both Ellie Leith and her stepdaughter Maddie, and perhaps the author of the novel:

I desired my dust to be mingled with yours

Forever and forever and forever

Why should I climb the lookout? (*Clade*, 2015: 56)

If the first citation emphasizes the ephemerality of life, the second shows indulgence in its great passions and ecstasies. But what is more striking is Bradley's reference to Daniel Defoe's famous book 'A Journal of the Plague Year' (1722) that talks about the bubonic plague that struck London in 1665. The first and third references have a thematic function in their emphasis on the state of transformation of the planet and the cases of plagues and epidemics which might be the prelude for other ominous things. The reason is clear enough: "Climate also affects the behaviour, exposure, and habits of people, their crops and their fresh water supply. This can in turn, affect human vulnerability to pests and diseases" (Gobel, 1997: 98).

Another artistic device is the recurrent use of the bee hive in every chapter. Obviously this is deliberate as it enables the writer to make readers recognize and feel the damage human beings have been inflicting on the environment. Bees' age as species is note-worthy as it is "about 4000 years old" (Abivardi, 2001: 458). This relatively long age of bees will be disrupted by man's greedy and subversive actions culminating in what is called 'Anthropocene', a term referring to the few decades in the last century when man brought about this irredeemable change in the eco system and the subsequent climate changes. It is in the words of the Nobel Prize winner Paul Crutzen, "humanity brought about a new geological age in Earth's history: the Anthropocene" (Nahrung, 2016: 2).

It is not simply the extraordinary length of time that bees have survived, but also all types of threats and difficulties. There is another trait distinguishing lives and actions of this species. Bees enjoy a mode of living

that is marked by strict order and cooperation in setting up the hives. In choosing the beehive as the center of reference to his own method of narrating his novel, or rather, the collection of anecdotes, Bradley suggests the irony between their extremely long history and their mechanical life:

She (Ellie) has seen fossils of bees, bodies in stone dating back 140 million years, evidence that they existed alongside the dinosaurs, that they were moving between ancient flowers in the forests of the Cretaceous. It is a dizzying thought, the idea that they have existed for so long [...] (177)

This free association of Ellie's ideas is definitely important as far as the theme of the present novel is concerned. Like bees, human beings have lived a long time of peace and reconciliation with their environment. But once their minds have become sophisticated and complex, the first victim of this unexpected development is the environment that has been undergoing catastrophic changes in its very structure. By implication, the writer expresses a deep sense of nostalgia for a time when man and his habitat were associated to each other by strong ties. The term *homo sapiens* implies rationality and reasonable planning for both individual life and environment at large. The irony here is that this newly developed faculty in man gradually turns into a subversive and aggressive act that seeks only to gratify its greed and selfish interests. Indeed this is one of the fine qualities of *Clade* in that it motivates the discerning reader to pick up what is not stated directly but suggested through implicit discourse. Bradley's narration is marked by the capacity of the written statement or sentence to drive the reader to collaborate and see the text from his/her own angle or perspective. In this respect, Bradley shows himself to be close to the modernists that have devoted some space to the inferences and collaboration of the readers.

Thus it is possible to state that Bradley highlights the autonomy each chapter enjoys when it comes to narrative questions. Each character presents his/her viewpoint concerning the course of events and the bitter-sweet conclusion. The structure of *Clade*, then, resembles the honey comb, "each chapter (is) a self-contained cell forming part of the whole mosaic" (Brown, 2015: n.p.). This uncommon and inventive way of narration serves as a reminder that the event, any event, will be perceived and intensified by the self-contained standpoint adopted by the character in question.

Apart from the prime role assigned to the bees imagery in the structure of *Clade*, Bradley makes much use of the symbolic or suggestive echoes in his novel and its murky world. For instance, the main character of the novel, the scientist of climate change is Adam Leith. No doubt his first name carries biblical references as it brings to mind the primordial figure, who is the ancestor of all human beings. His name suggests, according to John Locke, "the state of a grown man, with a good understanding, but in a strange country, with all things new and unknown about" (1846: 304). Contemporary Adam in the novel is in the same state of alienation and inability to grasp what is going on in his environment. Also his role in the novel is similar in that he is the ancestor of the family that will have extensions and more than one generation. There is another name that is used in this novel to reinforce the initial impression of the first one. The choice of the names of his grandson, Noah, is not coincidental: it is teleological in that it helps reinforcing the intellectual line of the book. In one of the many interviews held with Bradley, he admits that there is "a blurry line between the real and virtual that is threaded through *Clade*" (Woolbury, 2017: n.p.). Indeed Adam in the novel is preordained to be the ancestor whose progeny will live in the deep time of the future (21<sup>st</sup> century) and the countless challenges and afflictions they will encounter. Definitely, it is a painstaking and impaired life, but it is not like the desperate situation in *The Drowned World*. The name of Noah is highly indicative. His autism further causes for his solitary life and interests. He will choose the career of an astronomer, a scientist in the field of space. The physical and psychological problems of some of the characters in the novel can be seen as an example of the correspondence between the environment and its dwellers. As one scholar puts it, it is all about "vulnerability of human life and the fragility of our environment" (Monaco, 2019: 206).

The title of the novel immediately brings to mind biological associations. By definition, clade is "a group of animals or plants consisting of a shared ancestor and everything that comes from it" (Cambridge Dictionary, 2008). The shared element in the novel is the ancestor Adam Leith and the future generation that will live in the 21<sup>st</sup> century. His life will be a hard one, replete with challenges and unhappy surprises as a result of climate change and its devastating impacts.

The other point related to the structure and language of the book is the successful use of parallelism or reciprocity between human beings and the natural world. Bradley's *Clade* seeks to redeem the science fiction represented by Ballard's series of apocalyptic novels of the depressing atmosphere reeking in every section of those books. By implication, it is possible that Bradley has in mind the reader's response and reaction while reading such dark works of Ballard's type. Having written that, it is necessary to add that Bradley's work is no

less painful but he has the wit to hold a glimpse of light at the end of the tunnel. This important trait in Bradley's *Clade* bestows upon his novel some uniqueness and special flavour.

A passing look at the chapters of *Clade* shows that it has a number of episodes or short stories that revolve around the main figure in the book, Adam, and his fluctuating relationship with his wife Ellie. All this unpredictable family life and its ups and downs will be seen within the framework of menacing climate change and its endless threats. This balance between the two elements of the books and the intermingling between them is the hallmark of the book and its writer.

*Clade* is a novel that is inextricably entwined with the natural world, whether through direct physical contact or ruminations of the characters and dialogues with other characters. The initial passage of the novel moves in this direction as it narrates the imperceptible or perceptible changes continuously taking place in the cosmic order. The solstice here is celebrated at the beginning of the book and at its conclusion. What makes this common event significant is its position in the uncommon context of the novel which bestows upon it a new sense, a new value:

Humans have observed the solstice for tens of thousands of years, but are those festivities truly celebrations or sometimes ambivalent? Symbols of loss, of the running down of things? After all, the solstice marks the beginning of summer's end, the first intimation of the year's long retreat back into the dark. (4)

Indeed the conclusion of the novel pursues the same consistent image of solstice and ever-present concern regarding the future. If the book's distinguishing trait is that of hope in these harsh times, the conclusion runs in the same line of thinking: Noah's friend Izzie while dancing and celebrating the birthday of her friend, her inner thoughts revolve around this thematically important side of the novel:

as she watches the moves of lights, she can feel herself moving with them lifted up and on into a future that may be wonderful or terrible or a thousand things in between. And she realizes that whatever else happens, this is not an end but a beginning. It is always a beginning. (297)

These concluding words of the novel maintain a glimpse of hope in a work that keeps showing the dark sides of the climate and human existence, that is the medley or oscillation between fear and dream, wish and shocking reality. In the interview held with the author the reader can easily identify the differences between the present novel and Ballard's *The Drowned World* and its memorable way of rendering the climate world. Bradley elaborates the ambivalence between fact and fiction, hope and loss, the actual and wishful:

It is the story of three generations of a family set against the backdrop of ongoing climatic change, and explain the way that process shapes their lives and occasionally intersects with them. But although it assumes the world is going to be profoundly altered, it's deliberately not apocalyptic. (DI, 2017: n.p.)

In *The Drowned World*, the action shows that the devastation has become an irredeemable and unalterable fact. Accordingly the efforts of Kerans and his team center on salvaging what is savable. And feasible, if any. In Bradley's novel, the time is moving ahead: the characters like Adam, Ellie, their daughter Summer and grandson, Noah live in the first decades of the third millennium. In this novel, science is still a major and influential factor in the lives of many people. Adam is a Ph.D. student of science, especially in the field of climate change and its disastrous impacts. His wife's artistic interests do not provide her with the complacency she seeks. Recognizing the sudden death of her dear friend Holly, she finds that conception is the only weapon against the sudden and harmful effects of time. Hence she does all her best to overcome her infertility and getting a baby via the scientific IVF treatment. The painstaking efforts of conception finally succeed in having their Summer, the daughter whose name is associated with the global warming. Thus science provides the opportunity for a career to the ancestor of the family (Adam) and at the same time helps in implementing the requirements of the extended family. But will it do something substantial to the climate and the impending catastrophe? This is the crux of the matter in the novel. Unlike what has been going on in *The Drowned World*, *Clade* does not give up the ambitious plans and wide expectations pinned on science.

When we turn to Noah, the novel shows us how science can heal the psychological and emotional weakness of the grandson and restore his self-confidence. He is an autistic child who has difficulties in speech and social contacts. In contrast to his namesake, the biblical Noah and his incredible prowess in building his ark and piloting it at the most inconvenient situation, the present Noah is unable even to defend himself or establish contacts with his mates. But, thanks to science and its vast potentialities, at the end of the novel the reader notices that he has become more eloquent, outspoken and articulate concerning his field of interest, space." The

stars seemed so perfect, so still, their beauty disguising their unimaginable violence, the cataclysm of their birth and death"( 279).

Noah's view of the future of the planet could be the author's as seen through the different interviews held with him. It is very optimistic and keeps away from the gloomy judgments and visions of other writers involved in writing the same genre (cli fi). In this regard, it would be more convenient if one gives a passing reference to the statement of the American writer of science fiction Tim LaHaye(1924-2016) and his Ballardian view of the planet and its future, "Never in the history of mankind has there been so much fear of self-annihilation...People are asking what is going to happen in the future"(Firsing,2007:140). One positive aspect of Bradley's fiction, in particular *Clade*, is the more or less hopeful feeling the author fosters in the reader's mind and consciousness. Noah who has survived many difficult situations at home and public life, summarizes the gist of his experiences and understanding of the climate problem in the following words:

what of the future? What will be here eons from now?The ice is almost gone, but which it may take millions of years, there is little doubt that one day it will return, creeping back to cover the land, and the world will change once more, the turmoil and destruction of the past century being little more than a spasm, an interregnum in the great cycles of the planet's existence.( 281)

It has become evident by now that *Clade* has a dual structure: first it serves as the backdrop which is the climate change and its formidable impacts on people, animals and plants. No doubt this topic is very important, and in fact, has occupied the attention of environmentalists and experts. However, for all its prime significance, a topic of this sort might not attract the attention of great numbers of readers for different reasons. One of these is the expectation and priority of the reader in dealing with the novel and its fictional world. The very topic of science fiction and climate change is essentially scientific and even the terminology used here is scientific jargon both in *The Drowned World* or *Clade*. The two writers chosen in this study approach the narrative material and their important message. In the first example, Ballard has maximized this side of the novel at the expense of the artistic. After all, the cli fi or science fiction is an artistic work even though its topic is scientific or pseudo-scientific.

Bradley offers a very successful synthesis between factual material of his book and the aesthetic and artistic one. After reading *Clade*, what lingers in the minds of the readers is not only the ongoing apprehension of the future and what lies in store, but also the vivid characters, their passions, propensities and obsessions. With characters like Adam, Ellie, Maddie, Summer, Li Juan, Amir., Noah, and Dylan, the programmer of sim pictures of the dead people: each is memorable and cannot be easily erased from the memory. Each of them has his own register or imprint. Because of the successful involvement of these characters in different situations and relationships, they attract our attention, arousing our sympathy or at times antipathy.

Bradley's novel shows different types of maladies, pandemics and impairments such as AVRS, autism, asthma and infertility. From a literary- structural viewpoint, this correlation between the two sides of the novel makes it accessible and enjoyable. Bradley succeeded in bringing together the two lines of the book. In his presentation of the Antarctica and its deteriorating situation, there is something hopeful about it.

A final point could be raised regarding the two novels. If we follow the Hegelian paradigm "that reason unfolds through thesis, which becomes antithesis which is resolved in a synthesis"(Reyna,2017:100), the two novels will have their position in this dialectics. Frederic Brown, the American novelist (1906-1972) wrote his climate change novel, *Not Yet the End* (1940) in which he denied the entire view of the impacts of the climate change.(Brown,1993:145). If one follows this dialectics, it becomes possible to categorize *Not Yet the End* as the thesis, and Ballard's *The Drowned World* might represent the antithesis, while Bradley's *Clade* could serve as the synthesis, that is, a combination of the opposite tendencies of the two novels. Writers of climate change in the current century will inevitably choose one of these paths in line with the writer's own priorities and intellectual or perhaps theological background.

### 3. Conclusion

Ballard's fiction, in general, has dealt with problems in real world life and culture, such as consumerism, advertising, painting, films, global warming and the potential end of human civilization. In novels like *The Drowned World* or *The Wind from Nowhere* Ballard wrote novels that are serious documents pertaining to the precarious fate of humankind. *The Drowned World* does not shed light on the reasons that brought the planet to its desolate state. The writer's main concern is to reflect the repercussions of human interests and irrational actions. However the good people, the scientists and people who capitalize on rationality appear to be

too weak to change the status quo suggesting that evil is predominant and has the upper hand in a world that has gone awry.

In contrast to Bradley's novel dealing with the same topic, the dominant tone of Ballard's book is depressing and pessimistic. Consequently it did not score the same numbers of copies sold. Instead of the traditional huge readership, but the book has attracted the attention of limited academic circles for the seriousness of its content and the honesty of its intent. What is lacking in this valuable attempt is the thrilling and surprising touch one expects to see in a novel that transcends the bounds of place and time.

*The Drowned World* shows the futility of scientific enterprises before the wild and sweeping forces of nature. Kerans and Dr. Bodkin typify this category. The fact that Kerans and Hardman choose the south of the globe as their final destination signals their total despair. Moreover, the mental burdens incurred by a terrible and inhuman environment accelerated their surprising and fatal decision.

Man appears in this novel as very weak and vulnerable to a host of intimidating forces far beyond his meager power. This novel shows that Ballard's predictions are not isolated from reality and their manifestations are visible in our present daily life. The human world, although put in a totally different milieu, essentially remains as it is: good people confronting natural forces alone and others who are intent on disrupting their inner peace. People like Strangman represent the ever-present and sinister evil. The dystopian world of *The Drowned World* is the coupling between the natural and man-made. Although Strangman succeeds in draining some buildings from what used to be London, his intentions are not altruistic. He acts out of selfish interests and the authorities tolerate with his acts. Thus, the novel shows that Kearns' pessimistic tone is justified since the place he happens to live in is not appreciative of his good acts. Although *The Drowned World* capitalizes on the findings of reliable scientists, there are hints about the eschatological interpretations of man's end along with his planet. The novel's raison d'être is the gracious act of reminding authorities and people of the deplorable fate of mankind and the globe as a whole.

Bradley's impressive novel, *Clade*, pursues the same line of climate change fiction in highlighting the bad effects of human malpractices and technological subversive activities on the environment. When contrasted with *The Drowned World*, one can easily notice that Bradley's attempt is more comprehensive in scope as it emphasizes the environment at the expense of the human factor as in *The Drowned World*, but also the balance between these elements is restored in Bradley's novel. The author (Bradley) shows that the melting ice in the Antarctica is still going on as a sign of a long process of gradual diminishing. However, Bradley does not show that the situation is totally hopeless. In fact, *Clade* is a sort of compromise between two clashing feelings of hope and apprehension of the unpredictable future.

The novel cares for the aesthetic and structural aspects in addition to the characters that belong to three generations living in future time. The title, *Clade*, is convenient in expressing the complex relations between husband and wife, parents and daughter, mother and grandson, and how all are related to the ancestor. Adam, the fountainhead of the family tree. The relationship between Adam and his wife Ellie gets gradually tense as the wife insists on artificial conception through IVF operation. After long and painstaking attempts, the long-awaited baby, Summer, is born with asthma. Summer's son, Noah, again causes much concern and discontent for his grandparents due to his autism. Thus the questions of infertility, physical and mental impairment and drastic failure in moral and educational norms tying youngsters to their parents dominate the scene. In short, the novel suggests that if there is something wrong with the outside world, the environment, its offshoot is a discordant domestic life embittered with many physical and psychological disorders.

Seen from another angle, *Clade* does not maximize what is environmental at the expense of the human as in the case of *The Drowned World*. Here the two sides of *Clade*, the human and non-human, run hand in hand. Indeed this is one of the outstanding traits of Bradley's book. The author's viewpoint which can be gleaned from the total sum of the viewpoints in the novel is that life should go on and be lived, irrespective of its challenges. The pseudo-scientific tone of *The Drowned World* is strikingly absent here. Also the shadowy characterization of the science-oriented figures like Kerans is absent here. The main figure in Bradley's novel, Adam Leith, holds a firm faith in science as the only weapon to which one resorts in these hard times.

In *The Drowned World*, death is seen as the only option or solution for the ordeals stemming from an ever-changing environment and eventually leading them to the verge of the abyss. Only the unprincipled people like Strangman and his faction of mercenaries can survive in such hostile places. In sharp contrast to all that, *Clade* depicts many situations where the apprehensions and worries of the parents concerning their children's safety sometimes drive the reader to a state of identification or empathy so that even the climate issue becomes

secondary. There are social problems such as the generational gap, the diseases and the difficulty in acclimatizing to a difficult environment.

*Clade*, it has to be recalled, was published in 2015. As it is a recent publication, it is expected that there are very few books or academic theses or dissertations written on it. The current studies pay attention to earlier works or his other achievement in criticism and reviewing. Due to its intrinsic merits, *Clade* is expected to attract the attention of influential critics and scholars that will give the novel its due as one of the significant climate change novels. Essentially *Clade* is a book of love and hope that highlights the firm faith in man and his countless endeavors to survive. In *Clade*, Bradley engraves his name among the prominent climate fiction writers and environmentalists.

Seen together, the two novels have dealt with the drastic effects of climate change on environment and human life. Both novels show the precarious existence of humans as they face the uncontrollable changes taking place in nature and human nature. The impression one eventually gets out of these two important novels is the warning that humanity is heading to its perdition. The ordinary reader certainly realizes the message presented in these two novels. But the insoluble question here is the following: do the influential and leading figures in this world care for such genuine and heartfelt calls? The answer might be in the negative as most of them believe in actions rather than words, if one paraphrases Shakespeare's famous dictum.

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