Journal of Human and Social Sciences

Ecotopia and Petroculture in J.G. Ballard's "The Ultimate City"

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ABSTRACT

James Graham Ballard was a contemporary British novelist who published a wide variety of works ranging from climate fiction to transgressive fiction. "The Ultimate City" (1976) is one of Ballard's short stories that portrays a dystopian vision where a utopian urban experiment transforms into a catastrophe. The story tells the attempt of the protagonist, Halloway and his company to reanimate a city that was abandoned years ago due to oil depletion. Halloway aims to bring the city back to life through the limited amount of oil left in the city, only to confront chaos and disorder. Using the concepts of Ecotopia and petroculture, this article aims to explore the ways in which oil shapes and destroys modern societies and possible alternatives to this predicament in Ballard's work. To this end, after a theoretical discussion of these concepts, the article examines the ecotopian features in the ecological community in the text and compares it to the consumerist culture of the metropolis; and later addresses the problem of oil that is an essential component of modern urban life. This part of the article reveals the degree of dependence on oil and the transformative power associated with it through examples from the story. The article argues that "The Ultimate City" is a premonition to the reader concerning the current energy politics that may culminate in a total disaster unless necessary steps are taken.

Key Words: J.G. Ballard, "The Ultimate City", ecotopia, petroculture, dystopian fiction

Research Article

Received: 29.08.2021
Revision received: 14.10.2021
Accepted: 27.10.2021
Published online: 30.10.2021

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Introduction

James Graham Ballard (1930-2009) was a British novelist mostly renowned for his works of dystopian and transgressive fiction. A pioneer of the New Wave of Science Fiction movement, Ballard published preliminary works of fiction that criticize modernity and capitalism altogether. Dealing with themes such as ecological disasters, overpopulation and extraordinary apocalyptic phenomena, J.G. Ballard managed to set new perspectives in dystopian literature. Having written numerous short stories from the 1960s onwards, Ballard's focal theme has centered on "the ambiguous nature of modern life" (Firsching, 1985, p. 297) which is a recurring issue in most of his works.

This article aspires to analyze Ballard's dystopian narrative "The Ultimate City" under two major headings: "Ecotopia and petroculture." In a more specific context, the study aims to reveal that "The Ultimate City" exposes the Ballardian ecotopian society which envisages the society's transition to alternative sources of energy. To this end, the theoretical part of this study will focus on Ernest Callenbach's iconic novel *Ecotopia* and the substantial concept of "petroculture". Subsequently, the article will demonstrate the ecotopian practices and energy politics in "The Ultimate City" in order to demonstrate the possibility of a sustainable society without petroleum and its by-products. The following section will focus on the metropolis and the extent of oil dependence in it with its probable psychological and social consequences.

This paper aims to contribute to the Ballardian studies by viewing Ballard's work through an environmentalist perspective. Ballard's works are known for their depictions of the social and psychological trajectories of the western societies in a technological and urban landscape. However, there is a need for a closer inspection of the infrastructures that facilitate these trajectories and the relations of these infrastructures with nature. Dominika Oramus calls Ballard's works "a record of the gradual internal degeneration of Western civilization in the second half of the twentieth century" (2015, p. 12). The period to which Oramus refers is also called Great Acceleration, a term that J. R. McNeill and P. Engelke use to designate the period of anomalous anthropogenic influence on nature which started after the Second World War (2014, p. 5). The middle and upper-middle class characters and their spaces, which Ballard repeatedly uses in his works, are the 'products' of Great Acceleration that has extensively influenced nature. For this reason Ballard's work calls for environmentalist readings. The reason why "The Ultimate City" has been selected among Ballard's texts is that it explicitly illustrates the degree to which the contemporary society is dependent on petroculture, which is one of the results of Great Acceleration as well as it portrays an alternative to or an inevitable final destination of the present consumer society.

Ecotopia: The Ecological Utopia / Dystopia

Ecotopia by Ernest Callenbach is a utopian novel published in 1975. The novel's significance lies in the fact that it is regarded as one of the first ecological utopian fictional works to be written. Derived from the Greek words "oikos" (household or home) and "topos" (place), Ecotopia could be translated as "home place", a term which draws attention to human settlement and habitation (Berry and Proctor, 2011, p. 122). More specifically, an eco-utopia is defined as an "imagined time and place in which humans and nature co-exist in some kind of sustainable, socially-reproductive form, and in which the activities arising from human social practices do not appreciably affect the reproductive capabilities and cycles of nature" (Lipschutz, 2018, p. 3). Influenced by Thomas More's renowned work, *Ecotopia* tells the story from the perspective of William Weston, a journalist who conducts a journey to the imaginary country and society called Ecotopia. In the novel, the place named Ecotopia is depicted as a union of the states of Washington, Oregon and Northern California which all broke free from the United States in order to establish their own ecological utopia. Set in

1999, the novel projects a vision of 25 years into the future. Thus, Callenbach's *Ecotopia* presents an envisagement of an ecologically utopian society. Specifically, Callenbach's *Ecotopia* "needs not be taken as belonging to a marginal subgenre of utopias, but rather, as a focused meditation on the ecological dimension of utopian thought" (Berry and Proctor, 2011, p. 122). In this respect, Callenbach provides his own unique version of an environmental utopia.

Thus, *Ecotopia* incorporates some distinct characteristics. This brand new country is characterized by its environmentally-friendly facilities and practices. The land is full of recycle bins, wind power is used in many parts and even the railroad system is specially designed: "Constructed of huge timbers. The trains which usually have two or three cars run about every hour. […] Since it operates by magnetic suspension and propulsion, there is no rumble of wheels or whine or vibration" (Callenbach, 1975, pp. 6-7-8). Hence, the society of Ecotopia functions in radically different ways compared with the traditional and conventional society of the United States. Furthermore, the former, as Weston argues, defies the constitution of the latter: "Ecotopia still poses a nagging challenge to the underlying national philosophy of America: ever-continuing progress, the fruits of industrialization for all, a rising Gross National Product" (Callenbach, 1975, p. 4). Thus, along with this statement, the author contrasts Ecotopia with the United States and draws the conclusion that what is being conducted in Ecotopia stands in total opposition with the US, as Ecotopia implements the notions of "ecological economics" and "sustainable economics" and takes concrete action to diminish the environmental damage delivered to nature by capitalist hegemony (Chang, 2005, p. 253). Ecotopia thus marks the beginning of a brand new epoch, one characterized by "the aspiration to live in balance with nature and treat the earth as a mother" (Callenbach, 1975, p. 32).

From the early pages of the novel, Weston engages into a harsh criticism of American capitalism and observes that in Ecotopia, many consumer habits considered normal or routine by the American citizens are either forbidden by law or simply not available in the market for consumption:

> Many consumer items are considered ecologically offensive and are simply not available, so nobody had them: thus electric can openers, hair curlers, frying pans and carving knives are unknown. And to curb industrial proliferation the variety which is so delightful in our department stores is much restricted here. Many basic necessities are utterly standardized. Bath towels, for instance can only be bought in one colour – white. (Callenbach, 1975, p. 44)

These restrictions are enforced meticulously in order to reverse the effects of ecological disasters which have been inherited by the capitalist system. Moreover, Ecotopia also imposes strict limitations on TV advertisements as commercials are restricted to "mere announcements, without housewives or other consumers, and virtually without adjectives" (Callenbach, 1975, p. 43). As a consequence, this enrages businesspeople, causing them to direct fierce criticism against Ecotopia and blaming them for the downwards trend in economy (Chang, 2005, p. 254). However, Ecotopia distances itself from the classical accumulation of wealth. Weston makes use of the term "Comradeship" to describe the relationship between human beings and non-human living beings (Callenbach, 1975, p. 51). In addition, the term is a symbolic signifier for the general human sentiment towards nature and non-human beings (Chang, 2005, p. 254). The more Weston travels around Ecotopia and the more he observes this new country, he begins to develop sympathy towards this place shunned by the US. As he establishes a bond with the new country, Weston makes the idealist decision not to return home and vows to stay in Ecotopia (Lipschutz, 2018, p. 5).

On the other hand, while *Ecotopia* is an environmental utopia, it embodies a social dystopia at the same time. It cannot evade the inherent defect of utopian (con)texts, which

manifests itself in Thomas More's *Utopia*, too. *Ecotopia* bears an ironic and stark contrast between utopia and dystopia. It maintains a utopian sentiment solely in terms of environmentalism and ignores all other social facets of the community: "Politics border on the authoritarian; African Americans have retreated to segregated enclaves in cities; those who cannot accept Ecotopia are asked to leave or are deported. Sexism continues apace, aggression is ritualized, with men heroically throwing spears at each other" (Lipschutz, 2018, p. 6). Furthermore, Ecotopia is in constant rivalry with its opponent, the US. Thus, ironically enough, *Ecotopia* incorporates an eco-utopia and a dystopia. While the utopia is restricted to environmental concerns, the dystopia, on the other hand is spread out to the multiple domains of the social sphere. In the model society of Ecotopia, the sole concern is to provide balance between humanity and nature in an excessive manner that transforms into an obsession, leaving out all other norms and concerns a healthy society needs such as race, class, gender, equality. In other words, Ecotopia comes forward as an ecologically utopian state while simultaneously reflecting strong tendencies of an eco-totalitarian rule. The novel contains many indications towards totalitarian rule as its citizens "have to obey numerous laws as well as strict rules in favour of the protection of the environment and if citizens do not respect the 'rigid practices of recycling and re-use' or if they pollute, they might be imprisoned" (De Haan, 2019, p. 56). Thus, Ecotopia could be regarded as a version of "ecototalitarianism" or "ecofascism" (2019, p. 56). All in all, although *Ecotopia* is presented as an ecological utopia which forms an alternative to the dominant capitalist system, it imposes unique environmental measures with strict, authoritarian rule, disregarding individual liberties and human rights. Therefore, *Ecotopia*'s utopian aspect is confined to environmental practices only, whereas the dystopian rule prevails in all other areas of the society. In Ballard's "The Ultimate City", there are strong references to Ecotopia which is directly interrelated to the notion of petroculture.

Energy Shaping Modernity: Petroculture

Oil is the source of energy which dramatically shaped and altered society in the 20th century (Wilson, Carlson, and Szeman, 2017, p. 3). It is during the 21st century that humans have come to an understanding of how oil has managed to shape and transform the society into its current state (2017, p. 3). Humanity's dependence on oil has given rise to notions such as "perpetual growth, ceaseless mobility, and expanded personal capacities" but nevertheless humanity has become aware of the need to break with this dependency and adopt new forms of energies as well as new lifestyles (2017, p. 3). Along with the declaration of G7 nations that fossil fuel resources will run out by 2100, this upcoming transformation is more than ever evident and expected (2017, p. 3). Thus, oil and energy is viewed as: "the fulcrum around which many of today's most pressing social, economic, and political issues must be analyzed and understood" (2017, p. 4). To that end, the change of energy source will not simply be a transition from one source to the other, but will posit significant changes in terms of technological, political and cultural inclinations. In this respect, the transition of energy "will therefore involve not only a change in the kinds of energy we use, but also a transition in the values and practices that have been shaped around our use of the vast amounts of energy provided by fossil fuels" (Wilson, Carlson, and Szeman, 2017, p. 4). J. G. Ballard envisions the transition from petroculture to alternative energy sources in his story, "The Ultimate City" and conveys the readers his version of an environmentally-friendly society where oil has been depleted. For this reason, this study investigates the similarities between Ballard's Garden City and Callenbach's Ecotopia, and later seeks to demonstrate how the story highlights oil-dependency of the modern consumer societies that is sought to be overcome in ecotopian communities.

Humanity's progress has so far been directly linked to the story of rising consumption of energy (2017, p. 5). More specifically, "we can even think of human history as falling into

epochs marked by the human ability to exploit various sources of energy" (Jamieson, 2011, p. 16). Thus, the discovery of oil has provided a crucial part in maintaining an enormous boost in the human population and in technological progress that is often connected with the emergence of modernity (Wilson, Carlson, and Szeman, 2017, p. 5). This vast amount of increase in population and demand required a similar increase in the consumption of energy (2017, p. 5). Oil has dramatically changed human life/society and in this respect, "petroculture" stresses the impact that energy exerts on the cultural, social, and political areas of human life (2017, p. 9). Moreover, petroculture has become a major determinant of modernity. For instance:

> To be modern is to be mobile as never before. At the heart of this mobility is the culture of the automobile. In the West, the automobile has been imbricated as a normal and necessary tool for personal independence and the successful management of a nuclear family, which in and of itself is intrinsic to the neoliberal construction of personal success. (Wilson, Carlson, and Szeman, 2017, pp. 9-10)

Thereby, the automobile is presented as an ultimate symbol that cherishes and promotes individual liberty as well as ever-growing capitalist mass production.

Modernity cannot be thought of without automobiles which are petrol dependent vehicles. As a means of travel, transportation, mobility and freedom, the automobile as a symbol is directly associated with petroculture. Thus, petroculture forms a direct interconnection with the concept of modernity. The vehicles and other petroleum-powered devices, as well as petroleum-derived consumer items, have been inextricably linked to the contemporary imaginary as part of the development of a petro-capitalist economy (Wilson, Carlson, and Szeman, 2017, p. 10). Therefore, the relation between capitalist objectives and the values imposed on humans under the concept of modernity is undeniable. In addition, "freedom, identity, success: our deepest ideal and most prominent social fantasies are mediated and enabled by the energies of fossil fuels" (2017, p. 11). Due to this, the transition to another energy source will eventually mean drastic changes not only in economic and ecological terms but also in the way humans perceive and experience the world. As a result, petroculture is an endeavour to entitle and clarify the transition of energy, a preliminary stage in this unveiling cultural, social and political undertaking (2017, p. 12).

Furthermore, the relationship between oil and modernity is coined with the term "petromodernity". As a brief definition, petromodernity signifies: "modern life based in the cheap energy systems made possible by oil" (LeMenager, 2014, p. 67). From another perspective, the concept connotes "the condition in which we 'moderns' live, characterized by perpetual growth, ceaseless mobility, and the expanded personal capacities associated with the past century's new flood of energy into our lives" (Wilson, Carlson, and Szeman, 2017, p. 3). However, this imposed system is destined to end sooner or later as: "the Western way of life is gradually coming to an end, and the heralder of this demise shall be peak oil" (Sedighi and Albader, 2019, p. 1). Along with the end of fossil fuels, humanity is sure to experience vital changes in culture, lifestyle and in many aspects of the society.

Moreover, Kyle Conway examines petromodernity from a chronotopic point of view and determines that it "has structured people's experiences of time and space" (2020, p. 48). The scholar specifically concentrates on the 1940s and 50s in the US due to the fact that during this era, oil has exceeded coal and other sources as the most used form of energy and anthropogenic climate change has peaked causing the 'Great Acceleration'" (Conway, 2020, p. 48). Conway also highlights the interrelated bond between oil, capitalism and modernity using the following statements:

> Capitalism, fuelled literally and figuratively by oil, has a homogenizing effect on people. The logic of capital is efficiency, the pursuit of which has led to the instrumentalization of people, who come to have value in the role they play in the capitalist machine. The

> idea that technology develops to serve people's needs, they argue, puts the cart before the horse: the logic of capital, as invested in technology, is to subordinate people to technology. (2020, p. 49)

Thus, petrol has served as the major instigator of the capitalist system, imposing upon people the compulsory objective of efficiency and normalizing it as a common standard to be followed. Therefore, it could be pointed out that oil, as the main medium of the capitalist order, has succeeded in shaping human culture by transforming humans into a mere apparatus required to obey the standards set by the system. However, people are somehow silent because they tend to concentrate on their targets rather than the tools they utilize (Conway, 2020, p. 51). Thus, the mutual relationship between oil, capitalism and modernity is evident and ought to be acknowledged.

Imre Szeman indicates that "the deep connection between energy and culture" ought to be identified as energy has for too long been regarded as a neutral element (2017, p. 277). Szeman avers that although oil remains the dominant form of energy, coal, wood and human/animal power are still made use of in various parts of the world (2017, p. 279). In addition, the colonial and postcolonial policies were motivated by the aggressive drive to obtain new forms of energy and fossil fuels, specifically oil, coal and gas were major driving forces that provided financial support to the colonizing powers (2017, p. 279). All in all, global petroculture emerges as a prevailing culture established by the shift in energy and it is apparent that a new culture will arise as a consequence of the transition to another form of energy (2017, p. 285).

Ecotopian Garden City versus Metropolis

The 1970s witnessed an unprecedented crisis which shook the taken-for-granted life-styles of the Western nations. As a retribution to their political support and sympathy for Israel during Yom Kippur War, in which Israel occupied a vast amount of Arabian territory, the Organization of Arab Petroleum Exporting Countries (OAPEC) started to impose an oil embargo against such countries as the US, the Netherlands, Portugal and South Africa. Though the embargo consisted only of a reduction of "5 percent per month to unfriendly nations […] Saudi light crude went from $1.90 per barrel in 1972 to $9.60 in 1974" (Gorelick, 2010, pp. 63-64). For the first time since the beginning of modern history of petroleum in the mid-19th century, the Western nations faced a severe scenario of scarcity due to this political discordance between the oil producer and oil consumer countries. The rising prices and the ensuing images of long queues at the gas stations raised questions about the sustainability of the practices which heavily depend on the consumption of petroleum. Despite the prediction that fossil fuels will deplete towards the end of this century, as it has been stated above, the world, as it were, experienced a 'preview' of it in the 20th century. The scenarios of scarcity that gripped the public imagination also opened new horizons for the speculative fiction.

J. G. Ballard wrote his work titled "The Ultimate City" against the background of this crisis. Written in 1976, the novella takes place in a post-petroleum world (circa early 21st century) where the urbanites left the cities for good and live in the settlements governed by ecological principles. Halloway, a dissatisfied inhabitant of one of these pastoral settlements, flies to an abandoned city by a glider, only to find that the city is resided by Buckmaster, an old industrialist, Miranda, his daughter, Stillman, Buckmaster's helper and Olds, a mute with technical knowledge. No sooner does he arrive in the city and carry out a preliminary exploration of the city than Halloway resolves to reanimate the city. Enlisting Olds' help, with the promise of teaching him how to fly, he accomplishes his project with fresh arrivals from the surrounding garden communities. However, the realization of the project happens at the expense of Miranda who has been planting exotic flowers in the whole city, because the revival of the urban space is concomitant with an environment of vibrancy, corruption and

pollution that is intrinsically antagonistic to the wild flora that she aims to promote. Furthermore, the paradoxical constitution of the city is implied throughout the text: a city is an entity whose very features undermine itself. The rampant crime, pollution, traffic congestion and inflation become the yardsticks against which the success of the city is assessed. In that respect, the metropolis is diametrically opposed to the peaceful society and environment of Garden City from which Halloway fled. However, soon, Halloway is faced with violent riots that disrupt the urban order for which he invests effort. As a result, Buckmaster and Miranda leave the city; Stillman is killed during the conflicts; Olds flees with an aircraft and the other inhabitants return to their former settlements, seeing that there is no prospect of life in the city.

Thus, the novella brings together the theme of apocalypse that Ballard persistently employs in his cli-fi novels in the 1960s and the urban setting that informs much of his fiction in the 1970s. The first apocalyptic moment through which the city passes is not shown, but stated by the narrator:

> When the world's reserves of fossil fuels had finally been exhausted, when the last coal silos were empty and the last oil-tankers had berthed, the power-stations and railway systems, production lines and steel-works had closed for the last time and the post-technological era had begun. (2009, p. 877)

What distinguishes the human settlements of the post-technological era from the ones in the petroleum age is that they are small scale, ecologically oriented (e.g. the use of sun-powered appliances) and decentralized social formations. However, these settlements are more akin to a social ecological line of thought than anarcho-primitivist units. The people of 'the post-technological era' do not succumb to a nostalgic view of the Neolithic past, but build a social structure that is deeply seated in a culture of interdependence of human beings with each other and nature in an environment designed by specialists in various fields. When the cheap energy sources of the world are depleted, "the small but determined parties of colonists- doctors, chemists, agronomists and engineers- had set out into the rural backwaters determined to build the first scientifically agrarian society" (2009, p. 877). Though many ecological settlements founded with this principle are scattered across the globe in the story, the narrator focuses on only one of them, namely Garden City where Halloway lives. In many ways, Ballard's Garden City and Callenbach's Ecotopia have marked resemblances. The whole social and economic system in Garden City is designed in a way that does not interfere with the running of natural processes: "Here each home was equipped with recycling and solar-energy devices, set in its own five acres of intensely cultivated market garden, a self-supporting agricultural paradise linked to its neighbours by a network of canals and I conduits" (2009, pp. 877- 878). Thus, the relationship between humanity and nature ceases to be based on an exploitative model and assumes a commensalistic dimension. Especially, the way electricity is produced can be construed as a reaction to the objectifying social and technological practices of humanity on nature. Viewed from a Heideggerian perspective, the post-petroleum society reverts the logic of modern technology: "The revealing that rules in modern technology is a challenging [*Herausfordern*], which puts to nature the unreasonable demand that it supply energy which can be extracted and stored as such" (Heidegger, 1993, p. 320). The repudiation of the challenging attitude is an ecotopian hallmark which characterizes the whole energy politics of Garden City and the other ecotopian communities. The traditional gliding competition among the inhabitants further highlights this policy through details about the flying principles of the sailplanes. The competitors "[make] use of strong updraughts that rose from the heated greenhouses, solar reflectors and rooftops, the warm canals and clay tennis courts" (2009, p. 876) in order to adjust their altitude. Unlike powered flight, which Halloway's deceased father experienced during the last days of the petroleum age, the

sailplanes are emphasized to fly with a principle guided by a respect for natural processes, without an attempt to change or exploit them in any way.

The non-challenging attitude towards nature facilitates ecological sustainability, which, in turn, provides a sustainable society and economy. As a result, the habits of consumption are not based on rapid turnover of goods, but on the permanence of them. On Halloway's arrival in the abandoned metropolis, the narrator highlights one of the fundamental differences between Ecotopian Garden City and the metropolis as follows:

> Everywhere there were stores filled with domestic appliances, furniture, clothing and kitchenware […]. In Garden City there were few stores- everything one need, whether a new solar-powered kitchen stove or a high-speed bicycle, was ordered direct from the craftsman who designed and built it to one's exact needs. In Garden City everything was so well made that it lasted for ever. (2009, p. 879)

Similar to Callenbach's Ecotopians, the residents of Garden City eliminate an economic model fuelled by heavy consumption. The durability of goods as well as, in the case of "The Ultimate City", the abolition of pecuniary economy undermine any ambition to accumulate surplus money, which signals that an ecological society and capitalist mode of production/ consumption are mutually exclusive. On the other hand, the remnants in the unnamed metropolis serve as an archaeological evidence of a former civilization obsessed with production, marketing and consumption. For instance, while the women [of Garden City] wore simple home-woven smocks and jerkins indistinguishable from the men's" (2009, p. 898), the clothing stores of the metropolis are described as "cornucopia of suits and shirts, shoes and hats" (2009, p. 882). Halloway's first impression of the city is full of awe in the presence of myriads of choices. However, an industrial capitalist world cannot achieve such an 'abundance', without putting a greater demand on nature. Alan Durning warns "[i]f the life-supporting ecosystems of planet are to survive for future generations, the consumer society will have to dramatically curtail its use of resources" (1992, p.25). Excessive consumption of the previous generations leaves a landscape of toxicity in its wake. Buckmaster, who witnesses the rise and fall of this culture, takes Halloway for a tour around the city to show him "how the Twentieth Century had met its self-made death" (2009, p. 915). What Halloway observes is "artificial lagoons filled with chemical wastes", "canals silvered by metallic scum" and "thousands of tons of untreated garbage" (2009, p. 915). This brings the reader to the paradoxical nature of capitalism and consumption driven urban life: The very elements that constitute and flourish it are the agents that undermine it. The landscape of waste that Halloway observes is the product of an insatiable consumer society and industry.

The entropic characteristic of the city is counterbalanced by the utopian framework of Garden City. However, the lack of traditional industry in Garden City should not be interpreted as the absence of science or technology. At this point, "The Ultimate City" blurs the boundaries between technological and ecological utopias. While comparing the new society to the former one, the narrator maintains that "the inhabitants of the Garden City were aware that their technology […] had progressed far ahead of anything the age of oil and coal had achieved" (2009, p. 879). Marius de Geus indicates the difference between rationalist and romantic utopias and defines the former as "those that aim the conquest and domination of nature" (2002, p. 189) and the latter as "those that aim at a reintegration and partnership of nature and society" (2002, p. 189). Though Garden City, with its self-restrained and simple society, rather falls under the latter category and its inhabitants do not aim to dominate nature somehow, the technological achievements of the post-petroleum age are repeatedly highlighted. Thus, Ballard's ecological utopia does not exclude either technology or rationality. However, the rationality employed in this technology is not instrumental, but close to Callenbach's *Ecotopia* which portrays "a union of reason and nature" that is "less a vision of pre-technological past than of the carrying of technological progress to its logical extreme"

(Tschachler, 1984, p. 306). Hence, both works contend that it is not the technology *per se* which is the source of all evil and cruelty inflicted on nature but the type of technology. As a result, "The Ultimate City" guides the reader to ponder on the possibility of a highly complex green technology within a utopian framework.

However, utopian blueprints are notorious for transforming into their opposites when they are transposed to the social relations and political order. Tschachler extends his critique of *Ecotopia* to its totalitarian potentialities, proclaiming that Ecotopia is governed by "'a despotic reason' ultimately endangering the existence of utopia itself" (1984, p. 309). Ballard's Garden City is not exempt from the chronic blind side of utopias and it is Ballard himself who provides a critique of the utopian logic shaping the post-petroleum world. The inhabitants of Garden City are known for their peaceful and meek temperament. The social rapport is established so strongly that the gliding competition is organized to "let a little civilized rivalry into their pastoral lives" (2009, p. 874). However, even in this organization the docile participants lack the sense of competition, much to Halloway's disappointment. One of the prevalent features of Ballardian characters is their obsession with the possibilities of disturbing the order which they regard oppressive and paralyzing for human psychology, and Halloway perfectly fits into this line of Ballardian character typology. Garden City, says Andrzej Gasiorek, "lacks the gritty textures and edgy uncertainties that makes human existence, with all its glorious ambiguities, worth living" (2005: p. 22). In order to introduce these ambiguities into his life, he defects to the abandoned metropolis whose life was largely shaped by a petroculture in the past, an action which drives the reader to another ambiguous utopia.

"We'll Find Something Else": The Oil Dependent Culture

Halloway's discovery of aggression in his own character and his abrupt decision to leave Garden City is revealed to the reader during the gliding competition in which Halloway displays a contempt for the bucolic landscape, exclaiming that "all these cried out for a Pearl Harbor" (2009, p. 875). Though Ballard's works are replete with references to the Second World War as a result of his childhood in a Japanese Internment Camp, the allusion to Pearl Harbor in "The Ultimate City" may also serve to remind the history of oil, for one of the major factors that pushed Japan towards crossing the Rubicon was the U.S. oil embargo on Japan. The historical evidence proves the high degree of dependence on petroleum products even in a nation whose history of modernity and industrialization was only a few decades old back then.

The materiality of petroleum across globe has extended over a larger domain of social life in the post-war period and the metropolis in Ballard's story, albeit abandoned, turns out to be a standing proof of this trend. On his approach to the city, Halloway is welcomed by "a collapsed suspension bridge [laying] like a drowned saurian in the gateway of the Sound" (2009, p. 877). The first image bears testimony to the petroculture's influence on the physical space of the city. Contrary to the spatial organization that satisfies the needs of a sedentary life in Garden City, the architecture and planning of the metropolis is put at the disposal of a mobile population. Not only the urban fabric is dominated and fragmented by wide roads, but also the urban sprawl towards suburbs, the focus of much of Ballard's fiction, is facilitated by petroculture. Halloway's exploration of the city is marked by the immensity of the settlement:

> For the next two hours, as the sun drifted across the Sound, Halloway pressed on down the long avenues that carried him, block after block, into the heart of the metropolis. The office-buildings and apartment houses grew larger, but the centre of the city remained as distant as ever. (2009, p. 881)

The extensive use of oil that enables long distance commuting gives rise to suburbia which LeMenager calls 'Petrotopia' (2014) to stress the middle-class consumerist utopian characteristics of such places. Petroculture's transformation of urban space does not only

mean a mere physical modification of space but also creates a need for products and services to support the nuclear family residing in the suburbia (Wilson, Carlson, and Szeman, 2017, p. 10; Schneider-Mayerson, 2015, pp. 54-55). The residents of the metropolis are not like the nuclear families of Garden City who manage to self-perpetuate on a limited land. Dissociated from agricultural knowledge and practices, they are critically dependent on a regional and global web of supply chain, which further necessitates the consumption of oil. As Heather I. Sullivan argues: "a petroleum-derived road system carries food itself fuelled and protected by petroleum based fertilizers, herbicides, and pesticides, and transported in vehicles using petroleum" (2017, p. 414). The supermarket where Halloway has his first breakfast is a tangible proof of this dependence and the intricate web. What he eats encompasses a variety of processed and canned foods like "grapefruit juice, beans and peaches" (2009, p. 883) that need transportation from the production sites into the metropolis.

The evolution of cities into urban conglomerates renders cars an indispensable component of the urban social life. When Halloway, later, starts his project of reanimating the city, the narrator stresses that "[t]he motor-car was the chief commodity of the city, and demand for it was insatiable" (2009, p. 912). For this reason, one of Halloway's first moves is to commission Olds to run an automobile re-equipment line to provide the fresh arrivals with ready-for-use cars. However, what is curious about this move is that Halloway does not want to reanimate the whole metropolis but only a central part of it, which implies that automobile is not to be used out of sheer necessity but only for recreational purposes. Thus, it can be argued that Halloway only wants to accommodate the image of the urbanite which considerably depends on consumption. He provides the new arrivals with not only "three or four cars" (2009, p. 912) but also "garish clothing, records and cigarettes *they seemed to need above all else*" (2009, p. 913, italics ours). Furthermore, the extensive use of automobiles, says Ballard in an interview with Christopher Evans in 1979, "[offers] an outlet for repressed sexuality and aggression" (2012, p. 125). Indeed, the text underpins the relation between petroculture and aggression through numerous comparisons between the placid temperament of Garden City residents and the propensity of the urbanites for brutality and testing their limits. As Gerry Canavan aptly states: "petroleum allows for a tremendous amplification of human powers" (2012, p. 334). Accordingly, Halloway's first automobile experience is marked by his attraction to the "raw energy of the machine" which gives him confidence "that he could take on any opponent now" (2009, p. 912), which puts him in a position far superior to Garden City's inhabitants in terms of power. Not surprisingly, he tests his newly found power on the rescue party from Garden City, riding bikes, by chasing them with Stillman with the automobiles.

However, Halloway is unable to grasp the extent to which the boost of human powers may reach. The project of reanimating the city turns into a paradoxical one in which a life based on oil is invigorating and self-shattering at once. There are two reasons of this paradox. The first one is the illusion that the aggression created by unquenchable desire for more power, fuelled by petroculture, could be held in check. The fact that Halloway chooses a police station as his operational headquarter implies this illusion. However, as Firsching rightly detects, Halloway can be resembled to Frankenstein (1985, p. 297) in that he temporarily animates a monster that slips out of control. The second reason is the problem of sustainability of the energy sources in a petromodern society. The degree to which the post-industrial society is shaped by oil foreshadows Halloway's project of reanimating the city is stillborn. There is a crucial dialogue between Buckmaster and Halloway at the outset of the latter's project:

> 'There is a sense of style about you that I like, all too rare these days […] For once, though, don't pitch your dreams too high. What happens when the gas runs out? You're going to have a second energy crisis all your own.' Halloway shook his head confidently.

> 'Sir, there are millions of cars here. The tankers at the airport- some of them are half-full of aviation fuel, enough to keep us going for a year. After that'- Halloway gestured at the air- 'we'll find something else.' (2009, p. 904)

Halloway's tendency to wave aside the overwhelming question can be matched by the contemporary readers' refusal to imagine or face a society without petroleum. Hannes Bergthaller resembles social structures to biological organisms, for both "require a steady flow of energy in order to reproduce themselves" (2017, p. 427). Halloway's social structure is largely based on electricity, supplied by the gasoline-driven generators and high-speed mobility requiring fossil fuels. To build on Bergthaller's metaphor, Halloway can be argued to rely upon the blood cells that cannot carry oxygen within the metabolism, for the energy he uses is a non-renewable one. The more vibrant the metabolism of the city becomes, the faster it depletes its sources and terminates. The former evacuation of the urban populations is put as follows: "By some unconscious perception of their own extinction, the huge urban populations of the late twentieth century had dwindled during the previous decades" (2009, p. 877). The use of the word 'extinction' is crucial in that it implies the energy determinism on social structures, treating the urban populations as if they were a distinct species that can only survive by petroleum. Since any alternative to this structure is likely to bring him closer to the renewable sources like those in Garden City, Halloway's prospect of finding 'something else' is off the table. It is important to note that Halloway realizes his goal of reanimating the city thanks to the technical knowledge of Olds whose only expertise lies in the petroleum-based technology. On the other hand, his own technical knowledge is restricted to an ecologically oriented technology due to his education in Garden City. Thus, a social formation without oil can only return him back to his personal dystopia in which his ambitions are likely to be overshadowed by social taboos about oil-driven technology.

Furthermore, the social organization based on petroleum products is not without its ecological repercussions. The antithetical relationship between petroculture and nature is most explicitly portrayed in the relationship between Halloway and Miranda. During the absence of the urbanites, nature has been recapturing what once belonged to it, which is illustrated through the images of plants growing through the "radiator grilles" (2009, p. 882) or "cracked sidewalks" (2009, p. 883). Miranda serves as a catalyst agent that assists nature for the full 'reclamation' of the city. However, her project is disrupted by Halloway's own reclamation project. Fascinated by the power of the automobiles, he not only thinks that he can defeat any of his opponents but also assumes a destructive attitude towards the non-human world. During his drive through the streets with Olds, he suddenly and deliberately crushes Miranda's plants for fun (2009, p. 894). However, this is less an instantaneous pleasure than the overall mindset of domination in Halloway's mind. The amplification of his powers through oil enhances his anthropocentric views. Though he is attracted to Miranda and, for this reason, promises to help her to re-forest the city when they first meet, Halloway simply ignores his offer when he sees the city come into life. Even worse, he starts to use defoliants in order to undo Miranda's vegetation because he thinks that these plants "[threatens] to strangle the city before he could release it" (2009, p. 904). The mobility lying in the essence of the urban life renders the environment a *tabula rasa* on which a social organization based on the principle of efficiency can easily be inscribed. Ecological meltdown is not restricted to infrastructural demands of the urban population. The text also accentuates the petrogenic pollution in the cities: "In an alleyway facing the station a diesel generator was pumping out dense clouds of sooty smoke. […] Pollution was part of the city, a measure of its health" (2009, p. 911). Thus, the text repeats the paradox of petroculture in that what runs the cities is also what makes them uninhabitable.

Halloway suffers from the illusion that minor disruptions and disturbances will never evolve into a total chaos. In this respect, his perception of pollution and his attitude towards

Stillman are quite similar. Oil's potential to enhance human powers not only serves to Halloway's constructive policies, which also welcome a 'controlled' violence on society and non-human world, but it also fuels and facilitates Stillman's aggressive inclinations that eventually paralyze Halloway's order. Stillman, who drives a demolition vehicle around the city before Halloway's arrival, accepts Halloway's proposal to participate in the reanimation of the city, but the role he assumes is that of a gangster and later a putschist general who ransacks the city with his men. The traffic accident, in which one of his retinues kills a young girl, marks the point of no return in the story, because, after this incident, Olds, who enables the infrastructure of the urban life, decides to leave the city with Halloway's glider which he secretly equips with an engine. The downfall of Halloway's project happens exactly at this moment when Olds spills all the fuel reserves at the airport which later causes an explosion. Thus, the second end of the city is led once again by oil, which highlights the impossibility of a sustainable society dependent on oil.

Result and Discussion

Ballard's story offers no clear-cut solutions to the ecological and social predicaments of the contemporary civilization. Both settlements described in the novella have their distinct drawbacks. Moreover, Ballard himself can hardly be considered an environmentalist in a strict sense, having expressed that he has no qualms about the ecological degradation in his interviews ("Carol Orr. How to Face Doomsday without Really Trying," 2012, p. 64; "Simon Sellars. "Rattling other people's cages," 2012, p. 437). Though "The Ultimate City" portrays a world that is shaped, sustained, polluted and destroyed by petroculture in the service of industrial capitalism, it also explores the dystopian aspects of utopian attempts that are put forward as antidotes to petroculture. However, today, the majority of Ballard's readers do not live in ecologically oriented communities, like Garden City, but in those resembling the metropolis in the story. For this reason, the text provides the urban readers with a better critical distance that can enable them to question the consequences of their oil-driven lifestyles and the sustainability of the taken-for-granted technological amenities.

Due to these concerns, the last quarter of the previous century witnessed the birth and proliferation of *Ecovillage*s as a response to the ruthless technological improvements coupled with environmental degradation. Based on a similar logic with Callenbach's *Ecotopia* and Ballard's Garden City, these communities foster the social practices in which "human activities are harmlessly integrated into the natural world in a way that is supportive of healthy human development, and can be successfully continued into the indefinite nature" (Gilman, 1991). Amongst many other permaculture implementations, one of the defining characteristics of these communities is their refusal to use fossil fuels that have shaped many 20^{th} and 21^{st} century technologies.

In his oeuvre, Ballard embraces the technological landscape as an inevitable part and the reality of contemporary society in which "one has to immerse oneself [….] and try to swim to the other end of the pool" ("Thomas Frick. The Art of Fiction," 2012, p. 196). The author simply wants the readers to question their readiness for the exponentially improving technologies. Using a similar logic (but not the argument), this article has demonstrated that "The Ultimate City" urges the reader to question whether the society is technologically, psychologically and politically equipped enough to cope with a post-petroleum world that awaits it in a not too distant future. Evidently, the heavy dependence on automobiles, food supply chains, and energy infrastructures based on petroleum is not preparing the world for a scenario of scarcity, which makes ecotopian thinking and ecovillage experience imperative to maintain a smooth transition to low-energy societies.

References

Ballard, J. G. (2009). *The Complete Short Stories.* New York: W.W. Norton.

Bergthaller, H. (2017). Fossil Freedoms: The Politics of Emancipation and the End of Oil. In U. K. Heise, J. Christensen and Michelle Niemann (Eds.), *The Routledge Companion to the Environmental Humanities.* Oxon: Routlege.

Berry, E., and Proctor, J. D. (2011). Guest editors' introduction: Imagining Ecotopia. *Journal for the Study of Religion, Nature and Culture*, *5*(2), 121-125. Doi:10.1558/jsrnc.v5i2.121.

Callenbach, E. (1975). *Ecotopia: The Notebooks and Reports of William Weston*. Berkeley: Heyday Books.

Canavan, G. (2012). Petrofutures and Retrofutures: Oil, Scarcity and Limit. In R. Barrett and D. Worden (Eds.), *Oil Culture.* Minneapolis: University of Minnesota Press.

Chang, H. C. (2005). Ecological Utopia: A study of three literary utopias in the 1970s. *Airiti Library*, (11), 251-269. Doi:10.6258/BCLA.2005.63.09.

Conway, K. (2020). Chronotopes of Petromodernity: Oil and Mobile Privatization in the 1950s. *Nordia Geographical Publications*, *48*(6), 47-61. Retrieved from: https://nordia.journal.fi/article/view/90709.

De Geus, M. (2002). Ecotopia, sustainability, and vision. *Organization & Environment*, 15(2), 187-201.

De Haan, O. (2019). *How Crucial is Callenbach's Deep Ecological Utopia for the 21st Century Environmental Crisis? An Ecocritical Reading of Callenbach's Ecotopia (1975)* (Master's thesis, Université Catholique de Louvain, Louvain, Belgium). Retrieved from: https://dial.uclouvain.be/memoire/ucl/en/object/thesis%3A18154.

Durning, A. (1992). *How Much is Enough? The Consumer Society and the Future of the Earth.* New York: W. W. Norton & Company.

Evans, C. (2012). The Space Age Is Over. In S. Sellars & D. O'Hara (Eds.), *Extreme Metaphors: Interviews with J. G. Ballard 1967-2008*. London: Fourth Estate.

Firsching, L. J. (1985). J.G. Ballard's Ambiguous Apocalypse. *Science Fiction Studies*, *12*(3), 297-310. Retrieved from: https://www.jstor.org/stable/4239704.

Frick, T. (2012). The Art of Fiction. In S. Sellars & D. O'Hara (Eds.), *Extreme Metaphors: Interviews with J. G. Ballard 1967-2008*. London: Fourth Estate.

Gasiorek, A. (2005). *JG Ballard.* Manchester: Manchester University Press.

Gilman, R. (1991). The Eco-village Challenge. Retrieved from: https://www.context.org/iclib/ic29/gilman1/

Gorelick, S. M. (2010). *Oil Panic and the Global Crisis.* Chichester: Wiley-Blackwell.

Heidegger, M. (1993). *Basic Writings.* New York: HarperCollins Publishers.

Jamieson, D. (2011). Energy, Ethics and the Transformation of Nature. In D. G. Arnold (Ed.), *The Ethics of Global Climate Change*. Cambridge: Cambridge University Press.

LeMenager, S. (2014). *Living Oil: Petroleum Culture in the American Century*. Oxford: Oxford University Press.

Lipschutz, R. D. (2018). Eco-utopia or eco-catastrophe? Re-imagining California as an ecological utopia. *Elementa: Science of the Anthropocene*, *6*(65), 1-16. Doi:10.1525/elementa.320.

McNeill, J. R. and Engelke P. (2014). *The Great Acceleration: An Environmental History of the Anthropocene since 1945.* Cambridge: The Belknap Press of Harvard University Press.

Oramus, D. (2015). *Grave New World: The Decline of the West in the Fiction of JG Ballard.* Toronto: Terminal Press.

Orr, C. (2012). How to Face Doomsday without Really Trying. In S. Sellars & D. O'Hara (Eds.), *Extreme Metaphors: Interviews with J. G. Ballard 1967-2008*. London: Fourth Estate.

Sedighi, M., and Albader, B. (2019). Framing a new discourse on petromodernity: The global petroleumscape and petroleum modernism. *Planning Perspectives*, *34*(2), 345-353. Doi:10.1080/02665433.2018.1561323.

Sellars, S. (2012). 'Rattling other people's cages'. In S. Sellars & D. O'Hara (Eds.), *Extreme Metaphors: Interviews with J. G. Ballard 1967-2008*. London: Fourth Estate.

Schneider-Mayerson, M. (2015). *Peak Oil: Apocalyptic Environmentalism and Libertarian Political Culture*. Chicago: University of Chicago Press.

Sullivan. I. S. (2017). Material Ecocriticism and Petro-Text. In U. K. Heise, J. Christensen and Michelle Niemann (Eds.), *The Routledge Companion to the Environmental Humanities.* Oxon: Routlege.

Szeman, I. (2017). Conjectures on world energy literature: Or, what is petroculture? *Journal of Postcolonial Writing, 53*(3), 277-288. Doi:10.1080/17449855.2017.1337672.

Tschachler, H. (1984). Despotic reason in Arcadia? Ernest Callenbach's ecological utopias. *Science Fiction Studies*, 11(3), 304-317.

Wilson, S., Carlson, A., and Szeman, I. (2017). *Petrocultures: Oil, Politics, Culture*. Montréal & Kingston: McGill-Queen's Press - MQUP.