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Eco- cultural Imagination in Ernest Callenbach's *Ecotopia*

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Letter of Approval

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1

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Abstract

This paper is a critical discussion over ecological exploitation of human beings into the nature and need of awareness through literary and cultural practice to overcome the ecological crisis in the age of environmental destruction, in Callenbach's Ecotopia by using the theoretical concept of Chery Glotfelty and Harold Fromm's ecocriticism, eco-awareness and Gary Synder's idea of deep ecology. Callenbach urges for ecological awareness through his literary text to heal environmental exploitation. Based on textual analysis, ideas of different critics and library-based materials the researcher finds out that Callenbach's Ecotopia evokes for necessary of cultural action and common human responsibilities in the everyday fashion of socio-cultural and political life of the human world to replace human exploitation over the environment. It is the story of a newly modeled country Ecotopia, where Callenbach's protagonist Weston provides the reader with detailed insights into the Ecotopian's lifestyle, production, economy, eco-technology, politics, education and gender relations. Hence, the ultimate goal of this research is to give a message of ecological awareness in the age of environmental destruction.

Key terms: Culture, Eco- awareness, Eco-criticism, Ecology, Environment, Nature, Politics.

This paper studies Callenbach's fiction *Ecotopia* as an exposure of the ecological awareness that can be raised by bringing cultural awareness together with nature awareness. It carries the notion that eco-awareness as in the everyday fashion of socio-cultural life must be developed as common human responsibility to replace human exploitation of the environment due to anthropocentric activities. When we speak of the environmental crisis in particular, we imply it as a concern about the entire ecosphere. The effects of this crisis may vary noticeably across different places, regions, and locations. It seems clear that both living things and non-living are intertwined differently in different locations and regions though there are many other common similarities. Therefore, by knowing about culture, its ways and nature together, we know about the human-nature relationship and environment that almost varies accordingly.

Ecotopia- an eco-fiction presents the visions of a green and utopian world with its experimental 'form' and 'content'- the combination of notebooks and reports from its protagonist William Weston. Weston as a fictional journalist is the first to visit a newly modeled country, consisting of Washington, Oregon and Northern California, which broke from the USA in 1980. During his six weeks visit, he describes how Ecotopian society operates. He provides the reader with detailed insights into the Ecotopian's lifestyle, food production- circle and processing, car-less living, television and wares, Ecotopian economy; their woods, plastics, and their way of generating energy from sun and sea, eco-technology, politics, sexual freedom, education, and gender relations.

Ecotopia is a story of environmental humanities, non-human environments, and literary studies. It evokes ecological awareness to understand the human -nature relations and environmental crises. The ecological narrative as a practice of

'Ecotopian' tribes addresses the heterogeneous subjects such as environmental literature focusing on the human culture, environmental and non-human ethics, social-political issues concerning the local and global ecological crisis. It focuses on the nexus of cultural practices and ecology together in environmental literature redrawing the boundaries of environmental discourses. It reflects the need for investment in cultivating environmental consciousness. It has opened the much broader direction of interdisciplinary practice of environmental literature through the research report of his protagonist in the new state. His reports brought its readers to think about the ecological issues in pluralist method focusing on eco-cultural relationship; "pragmatic ecology into eco-feminism, toxic texts, urban nature, Darwinism, ethnic literature, environmental justice and virtual environments" (Gifford 15). He aims to set a new principle that can address the heterogeneous subjects such as environmental literature focusing on the values of human and environmental ethics what Felix Guattari calls "a becoming that is always in the process of adopting, transforming and modifying itself with its environment" (95). However, the main focus of the book is on ecological aspects. This paper argues for the nexus of cultural practices and ecology together in environmental literature.

Critics have examined different interpretations of the narrative. John W.

Ragsdale Jr. states in The Urban Lawyer; "Ecotopia could well make you want a stable-state, prefer a stable-state; and once that value transition is made, the permanent achievement of such a society becomes truly possible. As noted, personal value preference for a growth society combined" (360). He focuses on the personal role of an individual that can make a huge difference in the world. He believes that "if personal consciousness and feelings change, then the institutional framework of law, politics, economics, and technology will follow" (361). Similarly, Tschachler Heinz

in Science Fiction Studies claims;

This is evident in Callenbach's choice of the "stable-state system" as root metaphor. The referent here is economic; and, as Richard Frye has shown, from the perspectives of economics, the concept of the stable state is a sound attempt to incorporate environmental ethics into an economic system that preserves long-run viability and stability at the expense, if necessary, of short-run economic growth and resource consumption. (305)

He asserts that Callenbach's ideas are more or less similar to neo- Marxist;

"dialectically transform it by introducing a new novum, thus coming closer towards the representation of the "utopian locus as a mere phase in the infinite unfolding of the utopian horizon" (307). Further, he believes on the shift of power on gender role in the political millennium; "women must assume "power" and must use this power in "female" ways" (311). Similarly, Michael S. Cummings in *Utopian Studies*, states;

The Ecotopian vision of an ecological, steady-state, decentralized, cooperative, democratic, peaceful, and relatively egalitarian society struck a chord throughout the Western world. When I spoke with Callenbach in 1979, he explained that many *Ecotopia* readers had been pressing him to show how *Ecotopia* could be brought into being, in near future. (69)

His ideas are limited to the issues of the western world "it becomes clear to Americans that the Environmental Protection Agency has been captured by industrial polluters and their allies that cannot address the issues of non-west. He states that "Callenbach choreographs several key events to coincide in such a way as to motivate North westerners to secede while precluding anti-Ecotopian military intervention by the United States government..."(73).

However, very few have put light on the issue of this ecocritical perspective,

Archana Dahiya in the International Journal of English, Language, and Literature (IJELLH) writes; The novel "describes a set of eco-oriented people that have reestablished their society in an ecologically efficient manner. The society has reformed its ways, attitudes and modes to live in consonance with the natural world" (657). She focuses her essay on the ecological issue and the field of eco-criticism tends "reflecting a greater view of ecological vision that looks forward to the sustenance of all life forms and the maintenance of a symbiotic relationship between human beings and Nature" (658). She underscores two important philosophical understandings of the novel; "that is libertarianism and ecology, . . . while libertarianism is concerned solely with the human individual, the ecological philosophy has the non-human world as its sole concern" (660). Her ideas concerned primarily with the issue of ecology, gender role in development, principles of political decentralization, green economy, greener lifestyle and so on. The principle of political decentralization, women's role in the ecological necessity, an introduction of new ways of eco-friendly technologies, Ecotopia becomes the matter of various research subjects.

A New York Times article from 2008 called it "The Novel that Predicted Portland" for its advocacy of green lifestyles; "a cult novel, Ecotopia gained recognition for addressing issues that have since come to the fore as the environmental movement has grown." The issues that arise from the various critiques that I addressed above, in a way include the notion of anthropocentrism that looks only after the human role. My analysis will go broader discussion of how anthropocentrism issues of socio-cultural theories can incorporate the language of nonhuman and the environment and that can address the heterogeneous subjects together, focusing on the values of human and environmental ethics and socio-political issues of local and global ecological crises.

Although the critics earlier provided a different lens to understand the fiction from different angles, this research is based on ecocriticism. In my paper, I have addressed the following research questions: "why can Ecotopia be considered as a deep ecological utopia?", "what are Ecotopia's hidden aspects and failures?" and "how significant are deep ecological utopias such as Callenbach's Ecotopia, and thereby literature, for the 21st-century environmental crisis?" and "how can literature engage its readers and respond to the challenges of the current climate change crisis?". This framework is built on land ethics, nature as an organism and deep ecological approach developed by A.N Whitehead, Aldo Leopold, Arne Naess and Paul W. Tylor, Edward W. Wilson, who emphasizes persuasive feeling, unconscious pretension, interdependence and co-participation among organisms of the ecosphere and environmentalism and social justice.

According to Glotfelty's *The Ecocriticism Readers*, ecocriticism is the study of the relationship between literature and the physical environment (18). This paper applies the insight of ecological consciousness. It studies ecological consciousness from the interdisciplinary approach. It explores *Ecotopia* on the basis of how the economy, culture, ecology, environment, politics as a united force of Ecotopian's dignity.

Ecocriticism is an ecological approach to the society of relationship between literature and environment. It studies the reciprocal relationship between human beings and the environment. The home ground of ecocriticism is the human's inseparable attachment with the soil in its existence. Eco-critics view that ecocriticism is fundamentally an ethical criticism that investigates the possible connections among self, society, nature and text. Hence, it is a response to the need for a humanistic understanding of our relationship with the natural world in age or

environmental destruction. It is the critical and pedagogical boarding of literary studies to include texts that deal with human and non–human relationships. In this sense, eco-criticism is a response to the need for a humanistic understanding of our relationship with the natural world in an age of environmental destruction. The environmental crisis is a result of specialization that fails to recognize the interconnectedness of all things. It is an interdisciplinary approach that advocates the holistic view of the universe and the interconnectedness among them. Similarly, it tries to heal the fragmented and sick world. It promotes an understanding of the world that works to heal the environmental wounds that humans have inflicted upon it. Similarly, in the 1996 collection *The Eco-criticism Reader*, Glotfelty and Harold Fromm posit the same matter as it is discussed above:

Eco-criticism is the study of the relationship between literature and the physical environment. Just as feminist criticism examines language literature from a gender-conscious perspective, and Marxist criticism brings an awareness of modes of production and economic class to its reading of texts, ecocriticism takes an earth-centered approach to literary studies. (xciii)

Hence, these lines desire to contribute to environmental restoration. Eco-criticism tries to experiment on how language and literature transmit values with profound ecological implications.

Similarly, from the time being, eco-criticism has interdisciplinary nature. It invites all perspectives into its tent to understand the co-existence of living and nonliving entities. It has been developed as a highly interdisciplinary field with research, not only on written text but also on different varied fields such as media, photography, painting and so on. It encompasses non-human as well as human context and nature as well as culture. The crucial nexus between nature and culture

was strongly off-limits to mainstream academic discourse at a time when the world's population was doubling. When the cold war nuclear annihilation threatened, when water and air pollution, toxic wastes, deforestation, species extinction, global warming, urban sprawl were becoming worldwide issues, the practitioners of literary criticism ignored the underlying single most important issue of the time; man-nature attachment. This attachment between man and nature is indispensable for the sake of survival.

Ecocriticism turns away from the 'social constructivism' and 'linguistic determinism' of dominant literary theories and instead emphasizes eco-centric values of particular observation, collective ethical responsibility and the claim of the world beyond us. Regarding this Peter Barry's *Begging Theory: An Introduction to Literary and Cultural Theory* posits:

Everything that is socially or linguistically constructed has not diminished its grip on the day-to-day debate about literary theory. Nevertheless, the essence of ecocriticism's intervention, in theory, has been to challenge it. For ecocritic, nature really exists, out there beyond ourselves, not needing to be ironized as a concept by enclosure within knowing inverted commas, but actually presents as an entity which affects us, and which we can affect, perhaps fatally, if we mistreat it. Nature then isn't reducible to a concept that we conceive as part of our cultural practice. (252)

So, ecocriticism challenges even the feminist, Marxist, linguistic, cultural theories in terms of their focus on constructiveness. It is rather phenomenological and experimental than political and ideological. As a phenomenological and experimental theory, it focuses on the physical world and human consciousness about perceived

things. The relating of consciousness with the environment thus becomes considerable in eco-criticism.

Similarly, the *Vedic Experience* by Raimon Panikkar illustrates the relationship between human beings and earth:

In the Vedic attitude the earth spring from mankind's primordial experience of being on the one hand a guest and the other an offspring of earth. The earth is undoubtedly mother and close to man. But at the same time, she is alien, other and aloof. The earth is the foundation or the basic out of which emerges all that exist on which everything rests. The earth is the basis of life. (120)

He explains earth is the source of everything. Even man as a part of it depends on the earth in every respect. Eco-criticism embraces the opinion that no branch of knowledge can ever be devoid of eco-centric implications. Knowledge follows the earth; nothing can be understood in the absence of any spatial or temporal point of reference. Because of this reason, ecocriticism establishes the earth as crucial for the understanding of ethics and religion, art and literature, philosophy and physics, culture and politics, and all other disciplines.

Ecocriticism is not just a means of analyzing nature in literature. It implies a move towards a bio-centric world view, and extension of ethics, a broadening human conception, global community to include nonhuman life forms and the physical environment. Jean Arnold in "Forum on Literature and Environment," argues:

Eco-criticism is marked by tremendously ambitious intellectual, ethical, political and even sometimes spiritual agendas. Though there is already great diversity of opinion in the field of eco-critical dialogue often aims at nothing less than the transformation of human environmental and ecological consciousness, . . . By and large, eco-critics tend to believe that a considered

appreciation of these processes can help restore a harmonious balance between nature and human culture. (1098)

He argues ecological reading establishes a culture to respect the nonhuman world. If the interconnectedness between human and nonhuman members is understood, in many ways it can heal the environmental wound human have inflicted upon it. Ecocriticism looks upon how literature clarifies human responsibility to respect nonhuman entities. So, it is a worthy effort to direct our attention to matters about which the modern world must meditate on. The agendas posted by the ecocriticism have located eco-criticism beyond the traditional boundaries of literary studies making it assumed that such study can help to result in a harmonious balance between nature and humans.

Ecocriticism puts its basic biological proposition that organisms are the result of an interaction between their innate characteristic and their environmental influence. The home ground of literature is inexplicably the human world. Since everything is connected to everything else there is the organic bond between literature and landscape or environment as Joseph Carsol's *Literary Darwinism* argues; "the site of literature is a human world, and a work of literature is the product of a purposive human author addressing human recipients in an environing world" (164).

Ecocriticism assumes nature as an organic whole having cosmic unity of its ingredients. It is sensitive to interdependencies. The lives on the earth are connected and wholly dependent upon such basic natural elements for their survival: sunlight, symbiosis and mutuality and sustainable or unsustainable uses of energy and resources. At the same time, it gives special canonical emphasis to writers who foreground nature as a major part of their subject matters as Transcendentalist, Romantics and 20th-century poets.

Ecocriticism analyses the role that the natural environment plays in the imagination of a cultural community at a specific historical moment, examining, how the concept of 'nature' is defined and what values are assigned to it or denied it and how the relationship between human and nature is envisioned. More specifically, it investigates how nature is used literally and metaphorically in certain literary or anesthetic genres and tropes. This analysis, in turn, allows eco-criticism to assess how certain historically conditional concepts of nature and the natural, and particularly literary and artistic construction or it have come to shape the current perception of the environment.

Maneesha Deckah, a feminist analyst to animal advocacy initiatives applies to gender and racial representations of female sexuality. She criticized animal advocates for opposing the oppression of nonhuman animals through media images that perpetuate female objectification. These critiques are considered through a close examination of two prominent campaigns by PETA (People for the Ethical Treatment of Animals). The author argues that some representations of female sexuality may align with a post-humanist feminist ethic and need not be read as sexist. Examining PETA's famous anti-fur ads and the more recent Milk Gone Wild campaign, the author identifies where PETA's campaigns are objectionable under a feminist ethic and where they are subversive of an anthropocentric and male-dominated order alike. The article thus recuperates part of PFTA's work from the feminist critiques. But she reveals the constructions of post-humanist advocacy should exclude to avoid elevating the status of non-humans at the expense of women.

Ecology is the study of relationships and processes linking living things to the physical and chemical environment. Barry Commoner's The Closing Circle gives us a clear and understandable example of what ecology means; principles that provide the

web of life of the earth. He asserts the four basic and inescapable laws of ecology to overcome the environmental crisis. The First Law of Ecology: Everything Is Connected to Everything Else; it replicates the existence of the complex network of interconnections in the ecosphere among different living organisms, species, and individual organisms and their physicochemical surroundings. The ecosystem is the interconnectedness of multiple parts depending on one another. The Second Law of Ecology: Everything must go Somewhere; this law emphasizes that nature can take everything or there is no such thing as waste in nature. The system manages itself to protect its system by depending on one another. What is produced as a waste by one organism is taken up by another as food. Or, it transfers from place to place, converted from one molecular form to another. Animals release carbon dioxide as a respiratory waste; this is an essential nutrient for green plants. Plants excrete oxygen, which is used by animals. Animal organic wastes nourish the bacteria of decay. Nature manages itself as a system for the existence of its habitants and environment. The Third Law of Ecology: Nature Knows Best; explains the idea of human intervention in nature as a superior being. The intervention of human beings in nature to fulfill their needs has brought nature into the crisis meanwhile nature itself can select the best organism on its phenomena. Claiming rational to self human has bothered the nature for its natural selection of the environment what to raise and what not to. Nature has long experience of a selection of its organisms than the human race, its law and system have managed the environment for ages. The Fourth Law of Ecology: There Is No Such Thing as a Free Lunch; this ecological law embodies the previous three laws. The exploitation of nature will always carry an ecological cost and will inevitably involve the conversion of resources. The global ecosystem is a connected whole, in which nothing can be gained or lost and which is not subject to

overall improvement, anything extracted from it by human effort must be replaced. therefore, the equation must be balanced as we are doing and solving an environmental problem. Payment of this price cannot be avoided.

The four laws warn that every gain is won at some cost. The ecosystem is a connected whole, and any impact or anything extracted from nature by a human must be replaced. The avoidance of this price creates ecological disruption and biodiversity loss. Therefore, whatever we owe to our nature and to someone, must be restored and regained into a sustainable environment we are dreaming of.

Callenbach's *Ecotopia*, has sketched the sustainable way of mutual living between humans and nature in the country named Ecotopia. It embodies several principles of deep ecology and ecocriticism. For instance, Ecotopia's holistic environmental philosophy advocates nature-centered values, circularity and the natural regeneration of the ecosystems. Besides, Ecotopia promotes small-scale selfsufficient mini-cities which are in tune with their bioregion and which embody the ideal mix between the urban and the rural. With the notebook of its journalist, Weston, we are informed about the vivid system and sub-system, loco-techno based Ecotopian socio-cultural, political and economic life. It is narrated from the perspective of a journalist who newly visits the enclosed nation for the first time. Regardless of the same person, readers find two different perspectives of the journalist considering the lifestyle of two different nations. He compares the process of development, people's culture and attitude towards the environment between Ecotopian city and San Francisco (journalist's nation). Considering the lifestyle, first, he thought Ecotopia as an undeveloped nation with less economic, social, political and cultural growth has an uncomfortable lifestyle in comparison to his place, hence his understanding changed at the end of his report and even ready to spend his whole

life in Ecotopia. He believes in strict law and rules, private life and always attempt to control each and everything around him. He considers himself as a rational and Ecotopians are primitive, savage and uncivilized. But at the end of his findings he ponders to stay in Ecotopian world.

Ecotopian believe that "people were to be happy not to dominate their fellow creatures on the earth but to the extent, they lived in balance with them" (48). As a result, humans' happiness does not result from being at the top of the natural order but from living in harmony with nature. They are different from other countries. California, Oregon and Washington have highly scientific technology while Ecotopia has natural technology which facilitates a sustainable form of agriculture. Besides these natural advantages, these regions also have other assets such as excellent universities, numerous doctors, "a higher percentage of skilled workers as well as a greater number of engineers" (49).

The country has fewer population and more trees, has large boulevard than highways, a mall planted with thousands of trees, "street" itself, on which electric taxis, minibusses, and delivery carts purr along, has shrunk to a two-lane affair" (56). The stable state with almost natural products that oppose all processes and products, whose production and uses degrade the biosphere or are harmful to health. When he first reached the place, he quickly notes the downshifted economy; all corporate capital that was remotely portable. Ecotopian are content with a slower, humbler pace, including a 20-hours work week sharing the incomes and doubled the number of jobs. Despite his prejudice against the new state, he soon admits it as a sustainable state having eco- cultural norms, values, women-led eco-friendly politics, eco-friendly technologies, dresses, costumes and so on. Ecotopia differs in many essential ways from the journalist's nation. They seem excited to introduce their socio-cultural

values, their eco-friendly new technologies and socio-economic costs into any conversation:

He then handed me a small booklet, Ecotopia Explains. This document was nicely printed but rather quaint drawings. It had been prepared chiefly for tourists from Europe and Asia. It might make things easier to get used to, said the other guard, in a soft, almost insinuatingly friendly tone that I now begin to recognize as a national trait." Relax it's a free country. (6)

They are culturally, politically, socially and economically aware of their environment which is always the concern of each individual in their community. It has been developed as a matter of pride to share what they have. Sharing it with the world and making others know about their different style of eco-friendly living evokes their socio-cultural value of them. It awakes the researcher about ecological awareness. It must be raised by bringing cultural practice. It should be brought together with the everyday fashion of socio-cultural life.

Ecotopia draws the two-world views of human civilization that one of modern technological life within the thinking of journalists and other of eco-friendly so-called rural life based on loco-techno, cultural life. Undoubtedly, the modern world, regardless of their scientific discoveries, has plunged into global networks of communication provoking the environmental crisis as a global crisis. States and other social institutions are seeking the great acceleration of dramatic ecological change as their response to the environmental crisis. Their agendas and academic disciplines represented in journals and literary texts in larger effects are coping with global environmental change. In the other world of Ecotopia, the total effort is used to mobilize the loco- technologies focusing on the regional areas, to stand environmentally strong by eco-cultural development. It has unique conceptual

understanding among the diverse groups communicating across the cultural, economic, social and political level of its institutions and organizations:

The orchards, fields and fences look healthy and surprisingly well cared for, almost like of Western Europe. Yet how dingy and unprosperous the farm buildings looked, compared to white-painted farms of Iowa or New England! The Ecotopian must be positively allergic to paint. They build with rock, adobe, weathered boards- apparently, almost that comes to hand...they would cover a house with vines or bushes than paint it. (9)

Eco-criticism is a study of culture and cultural products like artworks, writings, scientific theories, etc. that is in many ways connected with the human relationship to the natural world. It is a response to the need for a humanistic understanding of our relationships with the natural world in an age of environmental destruction. It is the duty of the nation first learns to live on a stable-state basis within the sustainable resources of the planet. Human superiority over independence from nature must be controlled. To control this and achieve the social-political goal, Callenbach takes recourse to the model of "organic society":

Our system is considerably cheaper than yours if you add in all the costs.

Many of the costs are ignored or passed on through subterfuge to posterity or the general public. We on the other hand must acknowledge all costs.

Otherwise, we could not hope to achieve the stable-state life systems which are our fundamental ecological and political goals. (18)

Sustainable development in any society is an overall growth of the socio-economic and political system. It awakes every individual to the affairs of the state and the state also takes public account into serious consideration. The Ecotopian were conscious of the affairs of the state. They were aware of all the systems and development of the

state. They serve the state not only in the interest of the individual but as a common responsibility and take other natural organisms in an equal measure.

The whole socio-economic setup of this Ecotopian world is based upon earth-centered approach. It shows great care and concern for the natural surroundings. It preserves the use of 'energy-efficient resources and eco-friendly materials, 'economic and social stability, the reverence for Nature. It avoids consumerist policies and materialistic practices. It adopts a green economy and greener lifestyle as well as greener technological methods for the conservation of biodiversity. They have great reverence for the trees and forests. They do not cut them indiscriminately and incessantly for material pursuits. Marissa, the main character in the novel, who is associated with the lumber industry, also shows her deep concern for the trees. In this society, people use natural, renewable and 'bio-degradable products' such as wood, clay, bio-degradable plastics. The people here are bound by some ethical purview and a proper limit is set for the use of the things derived from nature:

Before people can buy a large quantity of lumber (for an instant to build a house) they are obliged to put in a period of some months in a forest campplanting trees, caring for the forest lands, and supposedly setting in motion the new growth that will one day replace the wood they are buying. (51)

The Ecotopian people believed in the ethical principle that whatever is taken from nature must be returned to it in a similar form as refreshed and pure as ever. They have even discarded all of their commercial habits and activities to reincorporate a purer form of Nature into the lives of humans. They live a very peaceful life in the lap of nature and have developed new techniques that worked following the laws of Nature.

They have even invented innovative processes and forms of energy sources as has been observed by the narrator, William Weston in the novel: The photosynthetic chemistry of a green growing plant, as is well known, enables the plant to capture solar energy and use it in the plant's growth. Ecotopian scientists believe they have now worked out a process whereby, in specially bred plants, this process could be electrically tapped directly. Such an unbelievably elegant system would be nearly perfect from an Ecotopian point of view; "your garden could then recycle your sewage and garbage, provide your food, and also light your house" (115). Ecocriticism is also a response to needs, problems, or crises, depending on one's perception of urgency.

In large part, environmental crises are a result of humanity's disconnection from the natural world and moving to urbanization. Increasing technology and change in economic growth also fail to recognize the interconnectedness of the environmental world. The breakdown of the feudal order and making society more towards a higher social formation focuses industrial growth and expansion. The rapid rate of urban growth and rural-urban migration highly affects the environment. Due to the different plans and policies followed by the government to develop the digital societies destroyed the ecology mostly in the Western world in the 19th century. Callenbach presents this horrible situation of other nations that brings human decline:

According to American demographers, partly to the persistent inflation-recession, partly to the relaxation of abortion laws, and perhaps most of all highly industrial society could be in more burden than an advantage to a family- the reverse of the situation in agricultural or less advanced societies. In addition, the horrible "Green Revolution" famines, in which tens of

millions perished in Pakistan, India, Bangladesh, and Eygpt, had provided new and grim lessons in the danger of overpopulation. (61)

He draws the rapid growth of the advanced industrial world dispersed the human world from nature. The natural order has been destroyed. It brings more challenges to the survival of human beings. Currently, the global human population is large enough and the technologies that allow humans to manipulate the environment are powerful enough. It causes alteration to the biosphere and the extinction of innumerable wildlife species is high. If present trends continue, there will be an eventual crash in the human population that will bring great suffering and cause.

Protecting biodiversity is now very essential since biodiversity is crucial for reducing climate pollution. If we do not protect biodiversity, the effects could be as harmful as the effects of global warming itself. This is especially with tropical forests- they are critical to fighting climate change and home to more species than any other ecosystem type. In other words, protecting biodiversity is essential for our wellbeing. Biodiversity helps to balance nature. For protection such forests, Ecotopian had "reforested enormous areas that had once been cleared for orchards or fields, wild or lay unused because of the exodus of people from the country into cities" (55). Ecotopian love, protect and take care of their forests. This is the reason why they have created the "forest service" (60). The Ecotopians' relationship with trees is so strong that they even talk to them. Biodiversity has its economic importance, so the protection of biodiversity is important. As we all know farm crops, as well as animals, are mainly descendants of wild organisms. Ecotopian forests contain "not only mixed-aged tress but also mixed species of trees and wildlife". They are generally a component of biodiversity. Some varieties of old crops have more taste or disease resistance, and they may be more suitable for future changes in the climate.

They argue that the "cost of mature- tree cutting is actually less per board foot than clear-cutting- but that even if they weren't, it would still be desirable because of less insect damage, less erosion, and more rapid growth of timber" (55).

Being eco-friendly will help save our planet as well as make it a better place for future generations to come. It is in our hands to make our environment healthy to live in. Green building which is also called green construction or sustainable building is simply the practice of creating structures and using processes that are environmentally responsible and resource-efficient throughout a building's lifecycle. Green building principles are aimed at minimizing impact upon the environment. In other words, these buildings are specifically designed to reduce the entire impact of the built environment on human health and the natural environment through the efficient use of the resources such as water, energy and other resources. They aimed to protect occupant health and improve employee productivity as well as to reduce waste, pollution and environmental degradation. The concept of building green provides the key advantages of environment or earth-friendly, energy-efficient, water conservation, fire safety as well as excellent indoor air quality. A similar concept with green building is practiced in *Ecotopia*:

Ecotopian thinking has moved uniformly toward power sources which, like solar energy, earth heat, tides, and wind, can be tapped indefinitely without affecting even the local biosphere. They take a delight in the windmills and rooftop wind-driven generators that are common in both cities and remote areas. (103)

They have "redoubled engineering precautions against nuclear explosions" and extended natural building, which focuses on using natural materials that can be found locally. As far as green living is concerned, it is more than recycling and conserving

energy. One needs to learn about different green products as well as environmentally or earth-friendly construction materials. For living green, we also have to get familiar with alternative energy resources.

Eco-criticism studies the structured legal systems of various traditions and communities. The concept and beliefs of people and society shape the wide range of ethical thoughts towards ecology. Cultures, religions and scriptures provide information about the relationships between man and nature and the human behaviors and indebtedness towards nature. Writing in the ancient works of literature like, the Vedas and the Upanishads teach our ancient people to worship nature and live with five elements of nature, the earth, water, air, light and cosmos:

The earth is undoubtedly mother, is close to Man, but at the same time, she is also alien, other and aloof. The earth is the foundation, the basis out of which emerges all that exists and on which everything rests. The earth is the basis of life and, when considered as a divine being, she always occupies a special place among the Gods. (Panikkar 109)

Panikkar assumes Vedic Man does not attempt to subjugate the earth. The earth is an object of worship and not of exploitation. Similarly, nature becomes more like a religion in Ecotopia. There are very few references to other religions such as Buddhism or Christianity except when a man is wounded after his fight in the War Games. It is highly present in the spirit of the ecotopian. The ecotopian's relationship to Mother Nature is compared to that of the Indians. And indeed, many ecotopian take Indian-inspired names and practice a nature religion similar to the Indians, as influenced by the Indian scriptures. Marissa Bright cloud, Winston's Ecotopian friend and lover and also a tree-worshipper, is one example of this. But the goal of Ecotopia is not to go back to the Stone Age. They use the newest technology and science to

create an environment as green as possible. The combination of cutting back on "some modern features, like mass consumption, and the use of cutting-edge technology to make the modern way of living eco-friendly, is what makes Ecotopia so special" (149). They hunt using bow and arrow but have the most high-tech system for solar energy.

A sustainable community is a community that meets the present and future social, economic and environmental needs of today's citizens without compromising the ability of future generations. It needs strategic plans and policies within the community and nation. It is also closely tied to the overlapping values of social equity, economic viability and environmental quality. A sustainable community includes healthy citizens, a healthy environment, availability of basic needs, social inclusion, a strong economy, development of community identity, and balance in decision making. Similarly, Ecotopia follows the fundamental ecological and social goal to maintain a sound state. The women leading Survivalist Party by Vera Allwen of Ecotopiahas biology-oriented policies; "to the organic structures of production and consumption, and also inherently inadaptable for dealing with regional ecological systems" (84). It introduced a package of laws that flatly prohibited many types of highly polluting manufacturing and processing operations:

To make the world safe for autos and impossible for people, the highway departments soon cleared the banks of all major and many minor waterways and created Seine-like embankments, strip parks, sandy beaches and other improvements. Where highways, the pavements was used in part as foundations for pavilions, restaurants, dance halls, and other remaining concrete was broken up and. . . Bicycle paths, minibus lines were laid out to provide easy access to the water for all citizens. (87)

It is an example of how the policies of the Survivalist party and Ecotopian government carried out the concrete cement buildings and replace them with ecofriendly technologies to provide facilities to its citizens. When the women-dominated Survivalist Party came into power and the conditions had stabilized, the government structures of the states and counties were reorganized. The Party considered them to be outmoded and unrelated to the organic structures of production and consumption. Moreover, they were considered to be inadaptable for dealing with regional ecological systems. Accordingly, Ecotopia was divided into "five metropolitans and four rural regions" (79). These regions also got greatly extended powers of the government of the local communities. The decision-making process within the party is described rather as social discussions than strict meetings with formal agendas. During the discussions, general issues begin to take shape, but there are no votes or organized decision-making. Instead, the consensus is achieved after the "ventilation of everyone's opinion". Only after this consensus is achieved, a "formal ratification of the decision" is taken. The content of the ecotopian law has changed somewhat since independence. Crimes against nature like "deliberate pollution, are the ones that the system looks most seriously upon, and those crimes are punished by severe jail sentences" (105). Similarly, "Embezzlement, fraud, collusion" are on the other hand called gentlemen's crimes and are dealt with just as severely as crimes like "assault and robbery".

The sustainable development goal assumes an organic society. It is a society that believes in organic production and consumption. In Ecotopia, "solar energy is commonplace; organic food is locally grown and consumed" (108). Instead of petrochemical fertilizers, processed sewage is used to cultivate crops. The philosophy of Ecotopia is based upon a strong belief in living in balance with nature. Weston

investigates how the Ecotopians organize their agriculture. He makes a conversation with the Assistant Minister of Food about the issue of waste and sewage disposal. According to him, the food cycle functions on "a stable state basis: all food wastes, sewage and garbage were to be turned into organic fertilizer and applied to the land, where it would again enter into the food production cycle" (18). In other words, given that waste is transformed into natural fertilizer, waste contributes to an infinite and circular food cycle. Every action taken has to be following the notion of the "stable state". The concept of a stable state is built upon the idea that nothing produced in Ecotopia should have an impact on the well-being of nature. Everything should be recycled and reused. It has implications for every aspect of life in Ecotopia from the personal to the most general:

When plastic objects are to be recycled they are broken up into easily handled pieces and thrown into "bio vats," huge tubes of a special earthen mush that soil micro-organisms find a good habitant. In time the results of this process are dried into sludge and recycled into land...coins, bottles, and mechanical objects of many are virtually decay-proof under ordinary circumstances- in particular, so long as they are not in contact with the soil. (78)

Ecotopian agriculture offers a sustainable alternative to modern industrial agriculture. It refers to a form of sustainable permanent agriculture that puts the "bioregional" worldview into practice like Lockyer and Veteto, in their book entitled *Environmental Anthropology engaging Ecotopia*, defines bioregionalism as "the understanding that humans and human activities are fundamental components of ecosystems [...] and that human organization should be guided by natural systems" (Lockyer and Veteto, 6). In other words, bioregionalism is the belief that human activity should be determined by the local bioregion or eco-region. Bioregionalism is

thus, especially a "vision of locally-based forms of sustainable development" (Lockyer and Veteto, 7).

Ecotopia usually uses bioregionalism and locally to grow their healthy food. It is particularly situated in California, its bioregions have many "natural advantages" (50) which ease its agriculture. Ecotopian food is grown for its taste and not for its look:

After seven years we were able to dispense with chemical fertilizers entirely. This was partly through sewage recycling, partly through garbage composting, partly through reliance on some novel nitrogen-fixing crops and crop rotation, and partly through methods of utilizing animal manure (19). This ended extractive and polluting practices in farming (20). Our food supplies are uncontaminated with herbicides and insecticides because we use cultivation for weeds and biological controls for insects (21). Our agriculture has reached an almost stable state, with more than 99 percent of our waste being recycled. In short, we have achieved a food system that can endure indefinitely. (22)

The self-reliance of the Ecotopian sustainable and local agriculture system advocates the theme of deep ecology. Producing no waste advocates multi-cropping methods to get rid of pests and to regenerate the soil. It develops the comprehensive relationship between humanity and the ecosystems from which we draw resources for our sustenance.

Deep ecology rejects this hierarchy between humans and other species because every species is part of an interrelated whole. Certain humans exploit animals because they consider that animals are more important than them. But, Ecotopians respect animal well-being by prohibiting intensive animal farming. They promote animal ethics; "Our farm animals are not kept in close confinement like yours, beef and cattle are never concentrated in forced-feeding fattening" (63). On this basis, it may be inferred that the Ecotopians are convinced that animals cannot be confined or exploited for human use since confinement leads to animal suffering. As a consequence, the Ecotopians promote

healthy animals raised in the open air and condemn the polluting factory farming which entails animal suffering. Their behavior towards animals echoes the deep ecological concept of biocentric equality.

In conclusion, Callenbach's Ecotopia can be considered as a deep ecological utopia. It attempts to portray a sustainable society and embodies many deep ecological principles. It draws a holistic environmental philosophy that views nature as a continuum in which all living beings are interconnected with each other. It embraces nature-centered values and rejects anthropocentrism. In keeping with their sustainable approach to waste, the Ecotopians prefer to recycle and fix objects. Rather than focusing on material possessions, the Ecotopians prefer to promote other values such as solidarity, spirituality, and a sense of community. Just like the deep ecologists, the Ecotopians deeply value and protect their wilderness as well as their forests. They practice ecologically responsible forestry and bioregionalism. Although the Ecotopians have developed green cities such as San Francisco, they advocate the creation of decentralized mini-cities or eco-villages. These mini-cities are perfectly adapted to their natural bioregion. Similarly, Callenbach's Ecotopia fulfills each dimension of the multidimensional concept of sustainability. It emphasizes environmental sustainability, a socially and economically sustainable nation. Even the Ecotopian political system is highly democratic and each citizen is allowed to take part in and contribute to the political debate. Moreover, it claims to have achieved gender equality. Its economy is sustainable because it is circular, small-scale, humancentered, and viable in the long term.

Hypothetically, Callenbach's *Ecotopia* is too visionary and ideal as well as descriptive. It throws the many ecological ways of development to the world while just like Weston; the reader could wonder where is Ecotopia going in the future?

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