

*The Development of Ecological Thought: Contemporary Approaches and the Way Forward*

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**Abstract:**

This paper aims to identify and relate different ecological approaches (primarily Preservation and Conservation) that played a significant role in developing a global ecological conscience. After presenting a comprehensive historical account of the approaches and movements in ecological thought, at the end of the paper, I will briefly highlight the potential areas of future research that could develop and re-frame ecological thought that ensures collaboration, co-adaptation, and sustainability in the environmental ethos. I fully acknowledge the diverse environmental movements in different parts of the world, and I also recognize the complexity, multi-dimensionality, and dissimilarity of ecological thoughts in different cultures. Nevertheless, the dominant and the most influential standpoint that governed and shaped modern ecological thought comes from western thinkers, scientists, and activists. Therefore, in this paper, I will confine myself to the western environmental tradition.

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Stewart Udall in his book, *The Quiet Crisis*, published in 1963, has warned us about the hazards of pollution, the risks of chemical contamination of factories, and threats to natural resources. (Udall, S.L. 1963). Many consider this book among the pioneer works in literature that identified the environmental crisis as a unique modern happening. A year before Stewart Udall, Rachel Carson's *Silent Spring* pointed towards our obliviousness and negligence with the usage of pesticides and their damaging effects on the environment and human beings

(Carson, R. 1962). Both thinkers emphasized and urged for the awareness of land conscience to protect the natural environment and species. As a politician and a federal government official, Udall's concern was on the mark, although he did not point towards the issue's cultural and philosophical depth; his wariness was 'Real'. Today, environmental degradation is no longer a *Quiet* crisis; it is getting *noisier* and *louder*.

This quiet and longwinded environmental crisis really set into motion in the middle of the 19th century as we come to understand it today. The realization began with the fact that human actions have an unforeseen impact on the environment. In the United States, the triggering factor of this awareness came with the impact of massive deforestation; in Europe, accelerated Industrial development made them aware of this chronic problem. However, initially, they considered it to be a localized problem, and furthermore, they did not anticipate the magnitude and complexity of the crisis. In the midst of the *Loud* crisis (the world wars, nuclear bombs, and economic deprivation etc.), environmental problems were often overlooked, ignored, and disregarded. Many considered this ecological crisis to be a minor technological issue that will be resolved eventually with more technology (Light, A. 2002).

The disposition of the environmental crisis is qualitatively different from any natural disaster (like earthquakes, tsunami) in the sense that it is a result of 'human activity' precisely. Environmental problems like climate change, soil degradation, waste control, global warming, industrial pollution, greenhouse-gas emissions, and the likes represent one visual aspect of the issue. Global biodiversity crisis, animal extinction emergency, and factory farming also stem from the same root. Higher temperatures could place further stress on water-scarce regions and make it harder to rear animals and grow food crops, leading to mass migration of people. So, it is not only adversely affecting the natural habitat of animals and plants but also significantly impacting our religious, social, political, and cultural spheres.

Even those remote rural areas which have not been industrialized yet are deeply affected by the global environmental changes - all we have to do is ask the local farmer. With technology, we have considerably changed the social fabric of our traditional lifestyle. Furthermore, the innovations and technological advancements that followed the Industrial Revolution have greatly impacted the social life of the masses overall. The process of urbanization, population, migration, and trading were integrated with the industrial revolution. Thus, in short, it can be said that it is the technological forces that ultimately paved the way for environmental catastrophes.

In the aftermath of the technological advancement that rapidly changed our landscape and the development in biology with respect to evolutionary theory, the study of the interaction of living organisms with its surrounding became a significant subject. Ecology, as a discipline, appeared in universities that studied the relationship between species and their relation

to the environment. Numerous studies were carried out to identify and understand the structural mechanism of the environment perpetrated by humans. Alongside academics, many environmental movements emerged in the west to restore our relationship with the natural environment. Few examples which represent the early environmental concerns: Sierra Club - an NGO was established for Nature protection; Aldo Leopold's *Land Ethics* influenced people towards developing a 'common land conscience' (Leopold, A.1986) (Meine C.D. 2010); President Roosevelt initiated a reforestation program; New laws, scientific analysis, legal provisions started before the first world war. Later on, the whole movement gathers momentum, leading to substantial scientific analysis, many books, and an arsenal of laws to preserve and conserve the environment.

## **The Preservation and The Conservation Approach:**

With the increasing deforestation and piling up of industrial waste, water contamination, air pollution in localities, people started discussing ecological *Preservation* and *Conservation* in the early late 19th and early 20th century. The ideas of *Preservation* and *Conservation* apparently seemed similar in positioning ethical perspectives towards the environment, but philosophically they were openly antagonistic. Later, we see that the way these two approaches have developed, they are so disparate and so separated that they really cannot talk with each other (Norton, B. 2010). Furthermore, these approaches ended up clashing ideological differences. The table below highlights the distinctive features and differences between these two approaches.

John Muir and Gifford Pinchot set out these early accounts of environmental approaches. This debate set out the ideological dichotomy between the economics cost-benefit approach against nature's aesthetics and spiritual valuation (Norton, B. 2010). Treating and effectively utilizing nature (animals, plants, wooded areas) as a resource for human use is fundamental to the conservational approach. Preservation has to do more with the moral aspects, the intrinsic or aesthetic value of the natural world. Nevertheless, the goal of both approaches is the sustainability of the natural world. These two ethical theories can be contrasted as,

- One that restricts all value to the fulfillment of human preferences – Conservation
- One that extends moral value to the elements of nature itself – Preservation

George Perkins Marsh, in 1864, wrote a book "*Man and Nature*" which inspired Gifford Pinchot in building his approach towards the natural world. Perkin's work was unprecedented and considered "the most influential text of its time next to Darwin's *On the Origin of Species*"

<i>Environmental Approach</i>	<i>Ontological Character</i>	<i>Axiological Character</i>	<i>Environmental Values</i>	<i>Methodological Focus</i>
Conservation (Pinchot)	Resource and Utility	Instrumental Value	Human-centered	Utility of Natural Resources for Human Progress
Preservation (Muir)	Wilderness, Aesthetic and Spiritual	Intrinsic Value	Nature-centered	Keeping the Natural world in a Pristine State

(Marsh, G.P. 2003). This book presented a historical, geographical, and social account of human activity and its impact on the environment. The consolidated efforts of Gifford Pinchot made him the chief conservation adviser to create the Forest Service. Pinchot appeals to a modification of Bentham’s utilitarian maxim, “the greatest good to the greatest number for the longest time”. Pinchot’s approach frames the environmental problem as, essentially, an economic problem. He argues for the cost-benefit analysis, and an analysis of how much timber you can get out of a forest would be the way we would decide environmental problems. In conserving the natural world, human progress and development are considered to be central. Primarily, the policies could be regarded as utilitarian. Moreover, the focus on the conservation of resources so that human beings can use those resources to their full advantage to produce a sense of happiness or contentment (Marsh G.P. 2003).

Preservation, on the other hand, has to do with the intrinsic value attributed to nature. This approach concentrates on the moral and aesthetic value associated with the preservationist contextual attitude and perspective of the famous John Muir. Muir was the first president of the Sierra Club, and he did not like what Pinchot was doing with respect to the enforcement of certain kinds of utilitarian policies. Muir believed that nature deserved to exist for its own sake regardless of its usefulness to the human being (Muir, J. 2011).

A variety of environmental perspectives today can be seen as an offshoot of Muir’s Preservation idea. Ecocentrism and biocentrism, in particular, suggest that there are fundamental

rights (given the intrinsic value) of these organisms to exist and to pursue their own interests. In other words, organisms, whether they be plants or animals, have a certain amount of entitlement, and a specific aesthetics is associated with them. However, it would be a gross misinterpretation to equate modern ecocentrism and biocentrism with Muir's Preservation. It would be fair to say that Muir was able to consolidate those things. There is a difference between attributing a spiritual value to nature and merely appreciating it as an aesthetic source of inspiration. For Muir, valuing nature was not just an aesthetic appreciation, rather it was the manifestation of God (Muir, J. 2011).

## **Global Ecological Conscience:**

The activism and postmodern intellectual revolts of the 1960s also played a significant role in shaping modern environmental debates. Moreover, it was during this time humans, for the first time in their history, landed on the moon. With this milestone, we also were able to see the earth as a whole. The mesmerizing photograph "Earthrise," taken in 1968 by astronaut William Anders, has expanded and transformed our visceral capacity into observable reality. This gazing of the planet from outer space was significantly persuasive in developing cultural awareness towards ecological conscience.

It is also essential to realize the profound psychological impact of the photos of a beautiful 'Blue planet.' Astronaut Ron Garan in his book, "*The Orbital Perspective*" brings our attention towards the outer space perspective of viewing the earth, and he suggested that this attentiveness arrives with a duty: the need to emphasize effective global collaboration (Garan, R. 2015). Although technology has connected us in ways no previous generation could ever be thought of, but our 'go-it-alone attitude' stops us from achieving new heights. This ecological conscience brought new awareness for the collaborative efforts for our communal, environmental concerns.

Simultaneously, the activism inspired by the civil rights movement and antiwar protests facilitated public awareness towards apprehending the environmental crisis. With the introduction of radio, television, and an increase in worldwide travel, societies rapidly became conscious of the acuteness of their common ecological tragedies. People started to share their worries about witnessing the intensity of oil spills in the ocean, industrial waste in rivers, and land pollution in neighborhoods. Around the world, especially in industrial countries, these predicaments arose new cognizance among the people.

Furthermore, the counterculture and postmodern movement began to question and challenge the established modern worldview. The postmodern thinkers defined this nefarious modern capitalistic worldview as a product of the 'Enlightenment Project'. As the awareness

and concern over the environmental problems spread, it also initiated new philosophical debates concerning ideals, knowledge, and social structures. It instigated and necessitated novel philosophical and ethical examination regarding the fundamental questions: what is a human being? What is nature? How are they related to one another?

During this time, the infamous article by Lynn White, “The historical roots of our ecologic crisis” published in *Science Magazine* in 1967, was a significant intellectual stimulus for the development of this field of environmental philosophy. Lynn introduced (or at least made widely famous) the thesis that our present ecological crisis is traceable to behavior founded upon ethics arising out of the Judeo-Christian worldview (White, L. 1967). Much controversy over the actual history of ethics and their practical influence had been forthcoming, no matter how one looks at White’s argument; he indeed hinted towards the following points:

- The historical connection between religious ideas and scientific development
- The possibility of multiple-interpretation of the religious texts
- The role of certain religious ethics in the ‘spirit’ of technology

White stimulated a new debate by linking our environmental crisis with historical religious ideas. In reply to his essay, scholars, philosophers, and authors of different fields criticized and pointed the shortcomings in White’s argument. The Biblical and Eastern religious scholars and many environmentalists arose to present their worldview as an alternate approach to environmental crises (Callicott, B.J. & Frodeman, R. 2008).

These developments in environmental studies in relation to other disciplines culminated in the 1960s and 70s - commenced into a new undertaking. In 1971, Baird Callicott had taught the first college course on environmental ethics. Many books and articles were published during this time. Amongst the first papers, published in 1973-5 by Arnie Ness (a very distinguished Norwegian philosopher), Richard Routley (an Australian logician), and Holmes Rolston III’s work emerged spontaneously in various parts of the world without much communication between the people who were beginning to work in the field. The first journal, “Environmental Ethics,” was established, in 1979, by Eugene C Hargrove, which still continues to be published by the University of North Texas. [For more details: (Light, A. 2002) (Brennan, A. 2014) (Attfield, 2019) (Callicott, B.J. 2008) (Hargrove, E. 1992) (Plumwood, V. 2001) ]

The new developments in cultural and ecological studies pointed out that the environmental crisis was not just the outcome of increasing technology and industrialization, but its root can be traced back to scientific theories, philosophical ideas, and religious beliefs. To analyze and study the underpinning assumptions as well as to understand the enormity and multiple

dimensions of this overarching environmental problem, the discipline of "Environmental Philosophy", and "Environmental Ethics" as a field of study was established. As a subdiscipline of normative science within Philosophy, ethics focused on the ethical and moral conduct of humans in general. The discipline of Environmental Ethics focused on human behaviors and morality and their relation with the environment as its central theme (Attfield, 2019). Environmental Ethics developed as an interdisciplinary discipline specializing in identifying and examining those ideas that make up our 'ethics' towards the environment and what we ought to do.

Over the past few decades, the global ecological conscience has been developing and growing. Many academic disciplines have been addressing and elaborating on the environmental accounts in a rigorous manner. But despite all this dedication and having the scientific data to back up one's claim, the problem is only getting worse. Thus, this growing environmental crisis raises a new question: Why, despite all the data on environmental issues, enormous technology, human power, and collective will, are we still unable to solve the situation? Is it too late to do anything? Or are we missing something else?

## **The Way Forward:**

*"A crisis consists precisely in the fact that the old is dying and the new cannot be born; in this interregnum, a great variety of morbid symptoms appear."* (Gramsci, 1971, p. 276)

Our planet is facing unprecedented global problems, and our inability to work together as a unit is making us incapable of solving these problems. The feeling of unity and interconnectedness, which astronomers experience, is indicating an aesthetic re-enchantment. Our failure to generate the enchanted feeling of interconnection and togetherness speaks volumes concerning our rational conceptualization and methodologies – our worldview. The need for collaborative and shared effort is inevitable for these communal problems. For any *genuine* and *true* collaboration, healthy relationships must be based on mutual trust, open communication, and the conviction and ability to work together toward a common purpose. However, just the mantra that 'we should work together' – collectively and collaboratively, cannot solve our incapability of working together – it is a vicious paradoxical fallacy. It is like saying, a student who is not interested in studying should take an interest in the study – as a solution. We need to discriminate the *cause of incapability* with the *effects of incapability*. Once we vigilantly figure out the root of the cause, after then, we will be able to make a resolvable diagnosis. I think the reason for our incapability of working together rests on certain metaphysical and

epistemological convictions.

Our perception and conception of the cosmos fundamentally define how we develop our culture, model our economy, structure our society, shape our psychology and form our self-image. These all, in turn, recursively shape our cosmology. The ecological crisis is described in terms of pollution, climate change, global warming, urbanization, and industrialization. These tangible and concrete ways of looking at this problem direct us to a technocentric approach to resolving it. No doubt, with new technology, we will find new efficient ways of low-pollution manufacturing, recycling, and conserving energy, but will that be enough to get out concealing deeper metaphysical and epistemological predicaments? There is a growing body of literature that recognizes the importance of human being's attitude towards the natural environment. The subject of responsibility, duty, and rights have received considerable critical attention and are thought to be key factors in situating our environmental discussions. Debate continues about the best strategies, plans of action, and policy implementations for environmental concerns. However, far too little attention has been paid to the philosophical and religious dimensions of the environmental crisis.

The conceptualization of what is a human being? What is nature? How humans and nature are related to one another? derives from our 'modern worldview'. Our ethical conduct and esthetical sensitivity are tied with this conceptualization. To appreciate the distinctive moment in which we currently live, first of all, we will need to understand the relation of philosophical and scientific ideas with the movement of thought and the history of ideas. Secondly, the scientific conception was not developed in isolation. Although largely, the modern understanding of the human-nature relationship materialized from our scientific knowledge, we also find a deep linkage of certain philosophical and religious ideas in shaping this understanding (Prigogine, I. 1984). Hence, it is inevitable to analyze and uncover those philosophical and religious forces that played a significant role in catalyzing this new paradigm. Thirdly, the distinctive character of modern culture, where the uniqueness of each culture and religion, despite the depth and historical richness, is crumbling in the face of globalization. This cultural homogenization is characterized by a focus on economic growth, detachment from history, and failure to assimilate cultural values. These modern trends have given rise to a new set of problems—social, political, economic and environmental.

Therefore, to establish sustainable-operative environmental ethics and environmental value theory, it is paramount to identify how deeply philosophy, religion, and culture are embedded in the intellectual, social, economic, and political domains. An Interdisciplinary approach that can fruitfully assimilate these diverse fields, understand their relationship, and thereby able to reconstruct new ecological thinking is indispensable.

## Further Reading

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