

ECOCENTRICISM AND ENVIRONMENTAL STEWARDSHIP OF *THE SILENT SPRING*

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Abstract

Silent Spring is an environmental science book a nonfiction written by Rachel Carson and published by Houghton Mifflin on September 27, 1962. Carson presented the complex web of life that links the microcosmic of creatures that is worms through the flora and fauna to the highest evolved human beings in about seventeen chapters and roughly in 395 pages. Stewardship is a theological belief that God is the earth's only creator and sustainer, humans are responsible for the world, and should take care of it. Many religions and denominations rest on such religious faith which include Christianity, Islam, and Judaism, that support the various degrees of stewardship. The most important fundamental dimension of environmental protection is "the right to a safe, healthy and ecologically-balanced environment as a human right in itself". Silent spring is a well documented appeal an eye-opener of the immense interdependence of the world's life beings on one another and how they now precariously stand on the verge of extinction due to the use of harmful, toxic chemicals, and also how important it is to protect the environment and its life forms for posterity. This article tries to justify the book as a pioneering call for Ecocentric ethics for Environmental Stewardship and as an assertion of Human Rights as worthy as any good literary work of standing.

Introduction

"Imagine a town without birds, without trees, and without beauty. Imagine a town where there is death and destruction all around you. Harmful disease-carrying bugs multiply in astounding numbers. The water is not fit to drink, and the food slowly deposits poison into whomever decides to eat."(Chapter1 'A Fable for Tomorrow' of Silent Spring). This description would stir up deeply an environmentalist and an ecocentric poet. Even though, it is believed that there is a fundamental contrast between the two, the scientific method is apparently different from that of literature. The Silent Spring is a work that blends the two disciplines marvelously well.

Ecocentricism of Environmentalists and Poets

Literary creation is guided largely and devoted to form and expression. Nature is a vast scene of inter-relatedness and interdependency between living organisms. "Cats have to do with Clover-crop and earth-worms with the world's bread supplies"(Darwin1874). 'the grass on the

meadows is connected with the rise and fall of nations' was shown by Fairfield Osborn, (1915) an archeologist . If we consider the spirit of literature and science, apparently, they are poles apart, the scientific method has the logical analysis of carefully observed facts and reasoning based on them and it demands an attitude dissociated of all emotion. Whereas in literature we presuppose at all stages intuition, imagination and emotion. But in contemporary times a well read man has to have knowledge of the writings of an Astronomer, an environmentalist, a Physicist and a Mathematician... etc.

We observe the discoveries of science and the existence of the physical beauty of the world and its mystery in J.H.Fabre's 'The Insects'(1921), Homer's work 'Social Life of the Insect World' has a place in Literature. Similarly, many books of Sir James Thomson who was a leading biologist of his time are now remembered for many of the literary qualities. Gerald Heard , a scientist-historian has given the description of the ionosphere in the alembic of literature . The sixteenth century essayist Francis Bacon had a mind very close to creative writers, though he did not appreciate much that had been achieved by science in his own times, like Galileo, Kepler and Gilbert's work on magnetism and refused to take it seriously. In seventeenth century John Donne was the first poet who knew the work of Copernicus and had visited Galileo. In 'Paradise Lost' Milton required the old system of Astronomy while he himself was aware of the new, his conclusion was indecisive. In the nineteen century period when the royal societies were established Dryden, Waller, Denham and Cowley were the poets associated with the societies, Pope respected Newton but was troubled by the contrast between man's increasing knowledge and his own inadequate control over himself.

Science, Literature and Religion are complementary

Contrary to the popular belief that science, Literature and Religion are entirely different disciplines; modern knowledge shows them to be complementing each other. The scientific method helps us to understand truth and apply it to life. The scientific approach and temper helps to tackle and solve the problems of life satisfactorily, it liberates man from ignorance. While sowing and reaping, the food we eat, the clothes we wear, our social relations are all under the purview of the supernatural and religion. But the more we understand life and nature the less we trust in the supernatural. On the other hand, literary activity is concerned with the idiosyncrasies, whims and caprices of the mind; it is directly related to human emotions, passions and sentiments it is not like the scientific bent of mind nor is under the control of the supernatural unless the poet wishes to. It is based on the personal whims of the artist, and in literature over the centuries there is an antagonism towards science which John **Keats** in his poem **Lamia** says:

‘Do not all charms fly
At the mere touch of cold philosophy?
There was an awful rainbow once in heaven:
We know her woot, her texture: she is given
In the dull catalogue of common things,
Philosophy will clip an angel's wings.
Conquer all mysteries by rule and line,
Empty the haunted air and gnomed mine-
Unweave a rainbow’

There was a continuance of the fear among the poets that science would incur the mechanistic & materialistic view of the universe, this was combined with an increasing

antagonism to technology and to the industrial society on which it was based. **Tennyson** in his poem **In Memorium**, confessed, the loneliness, the isolation and the despair which the new scientific view of the world had imposed upon him:

‘I falter where I firmly trod,
And failing with my weight of cares
Upon the great world’s alter-stairs
That slope thro’ darkness up to God’

The spiritual distress caused by the possibilities opened out by biological science is present in a number of nineteenth-twentieth century poems **Mathew Arnold’s** moving poem **Dover Beach**

The sea of faith
Was once, too, at the full, and round earth’s shore
Lay like the folds of a bright girdle furl’d.
But now Lonely hear
Its melancholy, long, withdrawing roar.
Retreating, to the breath
Of the night wind, down the vast edges drear
And naked shingles of the world.

From science and literature, it is quite apparent that both the branches of knowledge are complementary to each other. As we see some of the scientists have been true poets. According to Mathew Arnold, ‘all knowledge is interesting. Even isolated items of knowledge are interesting’, Wordsworth aptly said of poetry: it is the breath and finer spirit of all knowledge, the impassioned expression which is the countenance of all science” Can the poet whose eye is directed to man and nature be indifferent to it all? In spite of attempts in the nineteenth century to accept evolutionary theory as is seen in the poems of Meredith, *The Woods of Westermain* (1883) and *Earth and Man* (1883), The 20th c has few fundamental differences between the poet and scientist, for instance , H.G.Wells the author of *The Time Machine*, *The Wonderful Visit*, *The Invisible Man*, *The War Of The World* --Mysterious drugs or new medicines play a significant role in two other stories *The New Accelerator* and *The Story Of Elveshasm* caught the imagination of a new public with his scientific romances in all these stories , the starting point is supplied by science, but the convincing narrative of the consequences that follow the initial is the product of Well’s highly inventive and productive fancy. but still could not make contribution of an artist as such in a mechanized world, Bernard Shaw’s will to discern meaning and purpose in evolution made him revolt against Darwinian biology, as he conceived it , and adopt Neo-Lamarckism as his guiding principle behind his *Back to Methuselah*. Aldous Huxley in his novel *Brave New World* depicts a civilization in which babies are decanted from bottles, happiness is mass-produced by sleep hypnosis and sustained by Feelies , sense organs and soma, the perfect drug having all the advantages of Christianity and Alcohol, with none of their defects, God and Good have been abolished- they are superfluous as everybody is happy these days. The modern age psychology and Freudian Psycho-analysis have dominated the themes.

Rachel Carson, the Environmentalist and Poet

Rachel Carson’s “*Silent Spring*” the title itself was inspired by a poem by John Keats, "La Belle Dame sans Merci", which contained the lines "The sedge is wither'd from the lake, And no birds sing". Shows the ecological degradation. Her book shows the adverse effects of poisons from insecticides, weed killers, and other common products as well as the use of sprays in agriculture

that adds to dangerous toxins to the food source. Carson wrote mostly about the strength and resilience of natural systems. Carson presented the complex web of life that linked the simplest of creatures that is insects and birds to the complex human beings.

Carson's Stewardship to nature and Environmental Conservation

Stewardship is a theological belief that humans are responsible for the world, and should take care of it. Many religions and denominations have various degrees of support for stewardship. The most important fundamental dimension of interrelationship between human rights and environmental protection is "the right to a safe, healthy and ecologically-balanced environment as a human right in itself". Carson chooses Spring time to bring emphasis on the rejuvenation and vitality of life. As springtime is the season of heightened sexuality, popular literatures show the universal depiction of it, and the universal tokens of spring are renewed vegetation, flowers bloom, rejuvenated vegetation everywhere, nature that lies almost dormant through winter seems fully awake with the return of bird song. Ancient tradition took early morning bird song to be the signal for lovers to rejoin their sweethearts for the day, as in the famous lover's plea from the Song of Solomon

The flowers appear on the earth;
The time of the singing of birds is come,
And the voice of the turtle[dove] is heard in the land.

Arise, my love, my fair one, and come away. (2.12-14)

Whereas Rachel Carson in chapter 1 'A Fable for Tomorrow' of *Silent Spring* presents a contrast of a vibrant spring with a severe and bleak picture of a spring such as "Trees were vibrant and flowers made road sides delightful. Birds feed on berries and sing their great songs. The great variety of birds was well known in the countryside and some people traveled from afar to see them... Birds slowly disappeared and people continue to wonder. Sick birds shook violently and could not fly. Trees and flowers stopped blooming so the roadsides became nothing but withered vegetation. The fish had disappeared as well"... "There was once a town in the heart of America where all life seemed to live in harmony with its surroundings. The town lay in the midst of a checkerboard of prosperous farms, with fields of grain and hillsides of orchards where, in spring, white clouds of bloom drifted above the green fields. In autumn, oak and maple and birch set up a blaze of colour that flamed and flickered across a backdrop of pines. Then foxes barked in the hills and deer silently across the fields, half hidden in the mists of the autumn mornings. Among the roads, laurel, viburnum and alder, great ferns and wildflowers delighted the traveller's eye through much of the year. Even in winter the roadsides were places of beauty, where countless birds came to feed on the berries and on the seed heads of the dried weeds rising above the snow. The countryside was famous for the abundance and variety of its bird life, and when the flood of migrants was pouring through in spring and autumn people travelled from great distances to observe them. Others came to fish the streams, which flowed clear and cold out of the hills and contained shady pools where trout lay. So it had been from the days many years ago when the first settlers raised their houses, sank their wells, and built their barns."

As the book continues, she gives various examples of how insecticides and herbicides are not only unsuccessful, but actually very damaging and rather expensive. "Then a strange blight crept over the area and everything began to change. Some evil spell had settled on the community: mysterious maladies swept the flocks of chickens; the cattle and sheep sickened and died. Everywhere was a shadow of death. The farmers spoke of much illness among their families. In the town the doctors had become more and more puzzled by new kinds of sickness appearing

among their patients. There had been several sudden and unexplained deaths, not only among adults but even among children, who would be stricken suddenly while at play and die within a few hours. There was a strange stillness. The birds, for example - where had they gone? Many people spoke of them, puzzled and disturbed. The feeding stations in the backyards were deserted. The few birds seen anywhere were moribund; they trembled violently and could not fly. It was a spring without voices. On the mornings that had once throbbed with the dawn chorus of robins, catbirds, doves, jays, wrens and scores of other bird voices there was now no sound; only silence lay over the fields and woods and marsh. On the farms the hens brooded, but no chicks hatched. The farmers complained that they were unable to raise any pigs - the litters were small and the young survived only a few days. The apple trees were coming into bloom but no bees droned among the blossoms, so there was no pollination and there would be no fruit. The roadsides, once so attractive, were now lined with browned and withered vegetation as though swept by fire. These, too, were silent, deserted by all living things. Even the streams were now lifeless. Anglers no longer visited them, for all the fish had died. In the gutters under the eaves and between the shingles of the roofs, a white granular powder still showed a few patches; some weeks before it had fallen like snow upon the roofs and the lawns, the fields and the streams. No witchcraft, no enemy action had silenced the rebirth of new life in this stricken world. The people had done it themselves.”

In the third chapter ‘Elixers of Death’ Carson explains, Insecticides and herbicides, destroy more than bugs and weeds. The poisons within them have the power to poison water in polluted and marine life forms suffer Chapter 4- ‘Surface Waters and Underground Seas’. Chapter 5- ‘Realms of the Soil’ shows the adverse impact on soil insects, small animals, larger animals, and even people.

Carson’s commitment to Protection of Human Rights

There are three main dimensions of the interrelationship between human rights and environmental protection: The United Nations Environment Programme (UNEP’s headquarters in Nairobi from 30 November to 1 December 2009).The Expert Meeting provided a forum to review recent developments concerning the relationship between human rights and environment, including the recent resolutions of the Human Rights Council on human rights and climate change, and to discuss ways and means to promote integrated strategies and policies for the protection of human rights and the environment.

- The environment as a pre-requisite for the enjoyment of human rights (implying that human rights obligations of States should include the duty to ensure the level of environmental protection necessary to allow the full exercise of protected rights);
- Certain human rights, especially access to information, participation in decision-making, and access to justice in environmental matters, as essential to good environmental decision-making (implying that human rights must be implemented in order to ensure environmental protection); and
- The right to a safe, healthy and ecologically-balanced environment as a human right in itself (this is a debated approach).

All these aspects on human rights assertion through environment protection very vividly and effectively foreseen more than 52 yrs ago in Chapter 6- ‘Earth's Green Mantle’, Chapter7- ‘Needless Havoc’ and Chapter8- ‘The Human Price’ Although ‘she rarely used the term, Carson held an ecocentric view of nature, describing in precise yet poetic language the complex web of life that linked mollusks to sea-birds to the fish swimming in the ocean's deepest and most

inaccessible reaches and worms, insects, birds to man on land. Humans that consume or interact with animals and plants with such poisons are affected as the birds are; we are not immune'. She emphasizes the right to a safe, healthy and ecologically-balanced environment as a human right in itself. Destruction of wildlife through the widespread use of pesticides.

Despite condemnation in the press and heavy-handed attempts by the chemical industry to ban the book, Rachel Carson succeeded in creating a new public awareness of the environment which led to changes in government policy and inspired the modern ecological movement. Dichlorodiphenyl trichloroethane also called DDT is one example of such a poison which are indiscriminant killers. In Carson's time, it was a commonly used pesticide. She explains the major effect it has on birds; in any DDT sprayed area, how the bird population is virtually wiped out in chapter 8 'And no Birds Sing' & Chapter 10 'Indiscriminately from the Skies'. Humans that consume or interact with animals and plants with such poisons are affected with various types of cancers from the very young to the old. Chapter 14- 'One in every Four'. "Heavy mortality has occurred among about 90 species of birds, including those most familiar to suburbanites and amateur naturalists. In chapter 15- 'Nature fights Back' Destruction of wildlife through the widespread use of pesticides is explained in detail. Chapter 17- 'The Other Road' 'The right to a safe, healthy and ecologically-balanced environment as a human right in itself. The most important contribution of the book as it is said by its reviewers is a new public awareness that nature is vulnerable to human intervention. She further explains also about the biological controls which are safer and can be substituted very easily, and how these are less expensive and much more efficient in Chapter 17- 'The Other Road'.

Conclusion

Ideally a pesticide must be lethal to the targeted pests, but not to non-target species, including man. Unfortunately, this is not the case, so the controversy of use and abuse of pesticides persists. There is now overwhelming evidence from scientists that some of these chemicals do pose a potential risk to humans and other life forms and unwanted side effects to the environment (Forget, 1993; Igbedioh, 1991; Jeyaratnam, 1981). How pesticides have played havoc with human and other life forms are still a matter of relevant concern to environmentalists. Her books *Under the Sea Wind*, *The Sea Around Us* (which stayed on the *New York Times* bestseller list for 86 weeks), and *The Edge of The Sea* were well researched and documented opinions literally, and veiled in metaphor showing the inter-connectedness of nature and all living things. Carson's argument was that she showed the bad effects of chemical pesticides, the book may also be considered as an eye opener to the dangers that the life forms are exposed to. The *Silent Spring* must be read by those with a love and concern for the environment and safe guarding it for posterity, it may help to look up information about different chemicals, and also to understand various other related scientific phenomena to gauge its impact for someone with no scientific knowledge. The book's message still holds relevance and continues to hold, it generates a love of the environment and concern for it. If she had not shown us the ill effects of the use of pesticides and use of DDT, it would have continued to be over used, and many more insects would have become resistant to it, thereby destroying its effectiveness completely. Carson was well aware of the larger implications of her work. Appearing on a CBS documentary (2007) about *Silent Spring* shortly before her death from breast cancer in 1964, she remarked, "Man's attitude toward nature is today critically important simply because we have now acquired a fateful power to alter and destroy nature. But man is a part of nature, and his war against nature is inevitably a war against himself...[We are] challenged as mankind has never been challenged

before to prove our maturity and our mastery, not of nature, but of ourselves." Asserting the right to a safe, healthy and ecologically-balanced environment as a human right. Despite condemnation in the press and heavy-handed attempts by the chemical industry to ban the book, Rachel Carson succeeded in creating a new public awareness of the environment which led to changes in government policy and inspired the modern ecological movement and pioneering the Earth Day (*Earth Day* founded by Senator Gaylord Nelson is celebrated on 22 of April every year). *Silent Spring* is now recognized as one of the most influential books of the twentieth century. History professor Kroll (2002) wrote, "Rachel Carson's *Silent Spring* played a large role in articulating ecology as a 'subversive subject'—as a perspective that cuts against the grain of materialism, scientism, and the technologically engineered control of nature."

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The legacy of *Silent Spring* continues today in the scientific community's increased focus on environmentally friendly practices and the public's heightened support for sustainability in all areas of our lives. [Back to top.](#) [Additional Resources.](#) [Lesson Plan.](#) "The Legacy of Rachel Carson's *Silent Spring*" (ACS). Further Reading. Rachel Carson Collection (Chatham University). Rachel Carson's *Silent Spring*, published in 1962, was a landmark in the development of the modern environmental movement. Carson's scientific perspective and rigor created a work of substantial depth and credibility that sparked widespread debate within the scientific community and the broader public about the effect of pesticides on the natural world. *Silent Spring* marked the beginning of the environmental movement. The public listened to Carson, and ultimately, the government listened too. In 1972, the United States banned the use of DDT because it had been linked to cancer in laboratory studies with mice. [What Are Environmental Diseases?](#) However, the likelihood of an individual developing a specific disease depends on the hazards present in their particular environment and their genetic susceptibility to a specific hazard. For example, x-ray technicians are at risk for radiation-induced illnesses, whereas coal miners are prone to lung diseases caused by inhalation of dust. Proper use of safeguards can prevent these and other environmental diseases. [Myth Versus Reality: Proving Cause and Effect.](#) Environmental stewardship can be defined as "the responsible use (including conservation) of natural resources in a way that takes full and balanced account of the interests of society, future generations, and other species, as well as of private needs, and accepts significant answerability to society" (Worrell & Appleby, 2000, p. 263). This chapter explores the concept of environmental stewardship, the impacts of tourism on the natural environment (and vice versa), and ways we can minimize these impacts. [History of Environmental Stewardship.](#) The topic of stewardship entered public The popular book *Silent Spring* aroused public awareness of a sinister development in which streams and springs became silent as birds, frogs, fish, and other organisms died from the toxic chemicals used in adjacent fields. Ethically, the realization that humans can quickly and easily pollute and blight large regions through the careless use of chemicals illustrated the necessity for good stewardship of natural resources. As an alternative to control insect pests, Carson suggested the use of nonchemical methods that were more environmentally wholesome. Carson's passionate concern in *Silent Spring* is with the future of the planet and all life on Earth. She calls for humans to act responsibly, carefully, and as stewards of the living earth. Additionally *Silent Spring* suggested a needed change in how democracies and liberal societies operated so that individuals and groups could question what their governments allowed others to put into the environment. Far from calling for sweeping changes in government policy, Carson believed the federal government was part of the problem. *Silent Spring* inspired the modern environmental movement, which began in earnest a decade later. It is recognized as the environmental text that "changed the world."