Chapter- I

Introduction

"Canada is both young and old" (Staines 1). As a nation, it is young, as a settlement of Europe, it is an old nation. Besides being obsessed by the landscape, the Canadians are also puzzled by its diversity. The confusion experienced by them can only be understood in the light of the political and cultural history of their country. Except for its aboriginal populations, Canada is peopled wholly by immigrants and/or their descendants from across the globe. Hence, to speak of Canada is to speak of a nation made up of many nations. Historically, too, Canada has always been so, having as it does three founding fathers: the Natives, the English and the French who differed from one another racially as well as culturally.

The French, the English and the Americans periodically carried away furs, minerals and pulpwood from Canada before it was colonized. Unlike most colonial nations which have known subordination under one mother country, Canada has been a colony paying allegiance to several mother countries. It was originally a colony of France and England. The French surrendered New France to the English after their defeat in the Battle of Plains of Abraham in 1759. After the French English war of 1812, a sense of national consciousness may be said to have emerged in Canada even as the country itself acquired the status of a nation at the end of the Second World War. In 1867, the British North American Act established the Dominion of Canada with two official languages (English and French) and two religions (Protestantism and Roman Catholicism). Since then, Canada has slowly but surely become an economic colony of the United States of America.

Canada, unlike the United States, did not sense the need to vouch its nationhood in any way. The country contained people from various ethnic groups and each one of them tried to preserve its own ethnicity, failing to think about Canada as a whole. But in the contemporary age, however, it could be noted that the country is not so in any case. In the sharp comments of Mordecai Richler, the country contains various kinds of people; thirty percent of them are neither English nor French. It is young as a nation, because it has only crossed a hundred years only recently. But as a place of settlement, a place for immigrants from various countries, it is an old nation. This has led to the growth of the country's awareness as a nation with an independent existence, having a distinctive place at the same time in the international arena.

The development of Canadian literature has been difficult, complex and uncertain. Only when Canada cropped up as a single nation was the literature of the country able to achieve a new identity. The oral folklore, passed on from one generation to the other, of the native tribes of Canada could be called the earliest growth of Canadian literature. The Canadians have an oral tradition. The ancient dwellers spoke about the event around them and the world around them on general. The nineteenth century's men of literature felt alone with the lack of an audience, in a sparsely populated country. The problem of an audience has been an everlasting and a very difficult problem to deal with, for the both the writers and the critics. As a country populated with the people of various binds, as Edward Hartley Dewart lamented, there is no other country than Canada where native literature and the efforts in poetry are dealt with so much indifference.

The Canadian authors could not find proper audience in the period before the Second World War. Hugh MacLennan gives out two solutions for Canadian literature to become purely regional. It must be directed to at least two audiences. One is the Canadian public, which took the Canadian sense for granted but never defined its particular essence. The other was the international public, which had never thought about Canada at all, and knew nothing about the country.

The attitude of the Canadian audience changed at a later stage. The new growth of Canadian literature has altered the reading habits of a once-colonial audience. They do not turn instinctively to any other country, any longer. The Canadian audiences have become mature and interested in Canadian literature. In 1971 Margaret Laurence in Staines's *The Canadian Imagination: Dimensions of a Literary Culture* comments,

At one time it was extremely difficult to be a Canadian writer. We still had for many, many years a kind of colonial mentality, a great many people felt that a book written by a Canadian couldn't possibly be good... This whole cultural climate has changed incredibly, and particularly in the last decade... Canadian writers are probably in a better situation now than they have ever been. (4) The attitude of other countries of the world towards Canadian literature also changed. In the early part of the twentieth century Stephen Leacock wrote most of his shorter pieces for publication abroad in this age and wrote for an American audience. All these writers have toiled for a great result. Canadian literature commands international respect and attention.

Margaret Laurence, Mordecai Richler, Robertson Davies, Margaret Atwood, Gabrielle Roy and many others write for an international audience, which means they need no introduction with them. This in turn shows that Canadian literature has acclaimed fame throughout the world. People around the world know about almost all of the Canadian writers and their works.

The mist of romantic euphoria began to be dismissed from Canadian fiction when a new effort at realism appeared in the twenties. Charles G. D. Roberts, who dealt with human feeling in poetry, also had an unusual way of dealing with animals. His animal stories, *The Haunters of the Silences (1922), Kindred of the Wild (1902),* and other such works are examples. R. J. C. Stead (1880- 1959) wrote three novels, *Neighbours (1922), The Smoking Flax (1924),* and *Grain (1926),* which portray human feelings. A more compelling realistic novel is *Wild Geese* (1925) by the Norwegian Martha Ostenso which pictures with a harsh truth the turbulent life of the members of one family on a flax farm. Sinclair Ross's *As for Me and My House* (1941), is the story of a failing spiritual mission in a parish in the prairies. Ethel Wilson, a highly personal, intelligent novelist, appears in her best work, *The Equations of Love* (1952) and *Swamp Angel* (1954), as a poetic explorer of human connection and the

discontinuity of experience, reminiscent in the combination of luminous imagery and sharper judgement, of Conrad himself.

Canada has a great name in literary scholarship, both classical and modern. One of the finest of its ornaments is the work of Kathleen Coburn whose work on Coleridge is really noteworthy. The most distinguished of her many associates in this work is George Whalley whose scholarship is quite as inclusive and who joins to it a pure and elegant prose style and real subtlety of critical discernment. As Walsh has commented in *Commonwealth Literature*, he is "The scholar, scholar- critic and the critic" (92). The Canadian critic, who needs no introduction, Northrop Frye, has, without any doubt, added laurels to the crown of Canadian literature.

Canadian literature has a much longer history than is generally assumed, which includes a long phase of invisibility. It was only faintly heard even by its own people up to the 1950s, as if Canadian literary scholarship also shared the fate of the nation in being colonized. It took decades of struggle and persistent efforts to come into visibility in stages. One can see, in Canadian writing, the most significant trend, which is the introduction of new literary ideologies accompanied by new social ideologies, which add to its relevance at the national and international levels.

The Canadian literature was uplifted by a few Canadian literary critics who worked hard for it. Northrop Frye, who is well-known all over the world, is a great critic and theorist of Canadian literature, who was considered most influential person of the twentieth century Canada. He argued that it is very important to study the literature of Canada, however the quality of the original writing maybe, to fully understand Canadian writing and its environment.

Edward Killoran Brown, who wrote his name as E. K. Brown in his works, was a Canadian professor and literary critic. He reached fame through his award-winning book called *On Canadian Poetry*. It is said that Brown is one of the most important persons who were the reasons to take Canadian literature into its proper background. Lorne Albert Pierce was a Canadian literary critic who was also a publisher and an editor. He is best known for his anthology of Canadian literature. As a publisher, he published and supported Canadian literature for more than forty years. Another well-known critic of Canadian literature is Oscar Pelham Edgar, who worked as a teacher. He supported and nurtured Canadian literature through the establishment of the Canadian Writers' Foundation which helped the destitute authors.

The Canadian novel takes an altogether new turn in the 1960s with the appearance of women novelists like Margaret Atwood and Margaret Laurence who tend to write more as women than as patriots nor social critics or crusaders. A close study of their novels reveals that their focus is so much on the inner world of feeling and sensibility that even the impact of feminist movements has generated more of poetic or lyrical articulation of the inner tensions of women than social documentaries voicing the causes of women. The novels of the Canadian women writers move steadily towards the discovery of the self, the landscape across which the journey takes place can never really be either geographical or cultural but the interior landscape which transcends all local, regional, nationalistic or cultural concerns. Margaret Avison is one other Canadian writer whose works have earned acclaim. Avison's skills in the play of rhythm and enjambment, the syntactical complexity and metaphysical imagery are in the line of seventeenth century poets like Donne and Herbert.

There were some other writers like Rudy Wiebe and Alice Munro. Aritha Van Herk's novels *Judith* and *The Tent Peg* provide a definitive look at images of power as seen by a militant feminist in the late seventies and early eighties. Margaret Laurence is a writer who stresses the human factor and its relatedness to the land. She also seriously reflects on issues which affect the Canadian psyche, such as the obsession with the national identity.

Canada's writers, today, are significant actors on the international stage: Mordecai Richler, Michael Ondaatje, Margaret Atwood, Alice Munroe, Timothy Findley, Rohinton Mistry, M.G.Vassanji are also world-renowned. Many of the South Asian immigrant writers have greatly contributed to the growth of the Canadian literature, without the burden of either assimilating or opposing the Canadian mainstream culture. For instance, Rohinton Mistry does not talk about his Canadian experience at all in his *Such a Long Journey*, and still he has established himself as a Canadian writer. Set against the background of the Indo-Pakistan war of 1971, the novel examines the existential predicament of the central character Gustad Noble, a tragic hero who is pitted against heavy odds. Slowly, the story of Gustad Noble develops into a tale of a minority community and its sense of powerlessness. Margaret Atwood is another internationally known Canadian woman writer. The early formative years of Margaret Eleanor Atwood, who was born in Ottawa on 18 November 1939, were shaped by her father's profession and by her reading. The daughter of a forest entomologist, Atwood "grew up in and out of the bush" and "did not attend a full year of school until... grade eight" (MT 81). The fall and spring transitions between the city and the bush were made dramatic by the way her family changed appearances. They had one identity for the city and another for the bush. This "rhythm of going back and forth" made Atwood double-natured. So did her reading, of American comic books, Grimm's *Fairy Tales*, and Canadian animal stories. In the Canadian animal stories, "... the world of danger was the same as the real world…" She learned that "in this world, no Superman would come swooping out of the sky at the last minute to rescue you…; no rider would arrive… with a pardon from the king" (MT 32).

Margaret Atwood began writing at sixteen years of age. At Victoria College, University of Toronto, where her teachers were Jay Macpherson, Northrop Frye, Kathleen Coburn, and Millar MacLure, the exciting discovery that Canadians were writing and publishing made her feel that she could, too. She read the poetry of P. K. Page, Margaret Avison, James Reaney, D. G. Jones, and Douglas LePan. In 1961, with a B. A., from Victoria College, the E. J. Pratt medal for her first book of poems, *Double Persephone*, and a Woodrow Wilson fellowship for Harvard graduate school. Atwood began a ten year period during which she held several academic and non- academic positions, published fiction and poetry, and began postgraduate work after receiving an M. A., from Harvard in 1962. While teaching at the University of British Columbia in 1965, she wrote her second novel, *The Edible Woman*, published in 1969. Returning to Harvard, she married a fellow post graduate student, James Polk, but in 1973 they separated. After leaving Harvard for the second time, she taught at Sir George Williams University in Montreal, the University of Alberta, and at the York University in Toronto. During this time, she published five volumes of poetry: *The Circle Game* (1966), *The Animals in that Country* (1968), *Procedures for Underground* (1970), *The Journals of Susanna Moodie* (1970), and *Power Politics* (1971). *The Circle Game* won the Governor General's Award for Poetry in 1966. *The Animals in that Country* won the first prize in the Centennial Commission Poetry Competition in 1967.

In 1972, while an editor with House of Anansi Press in Toronto, she published *Surfacing* and *Survival: A Thematic Guide to Canadian Literature*. Although not original in its method and frequently criticized for the narrowness of its sampling, the selectivity of its non-inductive approach, and the subjectivity of its emphasis upon victimization and survival as the themes of Canadian literature, *Survival* had a great impact on the development of Canadian cultural nationalism, an impact deriving its power from Atwood's analysis of victimization as a structural feature of Canadian life. Atwood also furthered the cause of Canadian literature by working to recognize the Writers Union of Canada, which she chaired in 1981.

Many books and honours followed, after her association with a lot of reputation. She published five more volumes of poetry, *You Are Happy* (1974), *Selected Poems* (1976), *Two- Headed Poems* (1978), *True Stories* (1981), and *Interlunar* (1984); four more novels, *Lady Oracle* (1976), *Life Before Man* (1979), *Bodily Harm* (1981), and *The Handmaid's Tale* (1985); and three collections of short stories, *Dancing Girls* (1977), *Murder in the Dark: Short Fictions and Prose Poems* (1983),*and Bluebeards Egg* (1983). She also published *Second Words: Selected Critical Prose* (1982), which collected book reviews and essays, published earlier and also included many of Atwood's lectures and speeches.

Her personal life also changed in the meantime. After her divorce from James Polk in 1973, she moved to a farm near Alliston, Ontario, with Graeme Gibson, the novelist. Atwood is now a major public figure, not only delivering lectures at universities in Canada and abroad, but also addressing the Empire Club of Canada, the Modern Language Association of America, the Harvard Consortium in Inter- American Relations, and the world meeting of Amnesty International. With her works published in fifteen countries, she has achieved an international reputation.

Atwood, since the 1970s, has maintained her active engagement with Canadian literary and cultural politics, though she is now so well known internationally that readers tend to forget where she comes from. Atwood herself never forgets this, and her fictions are pervaded by Canadian cultural codes. At the same time the meanings of her novels cannot be restricted to a Canadian frame of reference, for stories are fabrications made out of language and they use narrative conventions which transcend self-conscious political ideologies. In *Margaret Atwood: Conversations*, she opines that:

I write for people who like to read books. They don't have to be Canadian readers. They don't have to be American readers. They don't have to be Indian readers, although some of them are. I'm translated into fourteen languages by now, and I'm sure that some of the people reading those books don't get all the references in them, because they're not familiar with the setting. I don't get all the references in William Faulkner either. That doesn't mean I don't enjoy the books, or can't understand them. You can pick up a lot of things from context. (144)

As a writer, Margaret Atwood is aware of the dynamics between an artist and the society in which he operates. She writes:

> Far from thinking of writers as totally isolated individuals, I see them as in escapable connected with their society. The nature of the connection will vary - the writer may unconsciously reflect the society, he may consciously examine it and project ways of changing it and the connection between writer and society...becomes the 'subject' of the writer. (32)

Atwood, in every novel, takes up the conventions of a different narrative form- gothic romance, fairy tale, spy thriller, science fiction or history working within those conventions and reshaping them. Her writing persistently challenges the limits of traditional genres, yet this experimentalism is balanced against a strong continuity of interests which are both aesthetic and social. In *Margaret Atwood: Conversations*, she notes: "I do see the novel as a vehicle for looking society - an interface between language and what we choose to call reality, although even that is a very malleable substance" (77). Atwood has always believed in the social function of art and in the writer's responsibility to her readers. She comments in her *Margaret Atwood: Conversations*, "If you think of a book as an experience, as almost the equivalent of having the experience, you're not going to put them through a lot of blood and more for nothing: at least I'm not" (10).

She discovers through her novels, the anomalies of Canadian civilization in which women are not allowed to make any strategy of grabbing the male space. Her novels represent and reflect an important development in the postsixties Canadian writing. Discussing about the role of the writer in society Atwood, in Tandon's *Margaret Atwood: A Jewel in Canadian Writing*, remarks that the writer "…tends to concentrate more on life, not as it ought to be, but as it is, as the writer feels it, experiences it. Writers are eye witnesses, I witnesses" (6). Atwood takes an altogether new turn in the 1960s to write more as women than as patriots. Atwood's victory as an artist and as a novelist is proven from the fact that she weaves the rich experience of life with her rich artistic material and produces mimetic pictures. Kadam in her dissertation exclaims: "Her narrative skill with its satiric or ironic content, its spontaneity and freshness indicates her rich creative faculty. Her characters are highly distinctive in their motivations, conflicts, manners and methods and lend depth to her art" (21). Margaret Atwood says:

> What kind of world shall you describe for your readers? The one you can see around you, or the better one you can imagine? If only the latter, you'll be unrealistic; if only the former, despairing. But it is by the better world we can imagine that we judge the world we have. If we cease to judge this world, we may find ourselves, very quickly, in one, which is infinitely worse. (SW 333)

Thus Margaret Atwood is clearly concerned with the power that shows physical, political, economic and social control over woman to fragment her and suggestion about global environment in black future.

In Tom Marshall's words,

Margaret Atwood, dark lady of Canadian letters, has been fortunate with her public, partly because of the espousal of feminist and nationalist aims. But her love of wilderness combined with cultural sophistication typifies that Canadian irony one perceives in writers like Isabella Crawford, E. J. Pratt and Earle Birney. (89- 94)

Atwood's works have been translated into more than twenty languages and published in twenty five countries. More than any other Canadian writer, Atwood has attracted maximum critical attention from various parts of the world. Atwood's most influential and controversial book is Survival: A Thematic Guide to Canadian Literature, was published in 1972. Even before the book was released, 'The Toronto Star' reported its astounding first printing of 20,000, with college-course outlines snapping it up sight unseen. Nearly twelve years later, it is evident that Survival itself, and the excitement created by it, were more manifestations of an intensely nationalistic period in Canadian history than permanent alterations to the national literature. The book provided a readable and witty access to Canadian literature at a time of great public desire for such access. It was openly sociological rather than literary in its approach, seeking to use literature to define "a national habit of mind". It provided "an illuminating approach to the kinds of poetry and fiction that Margaret Atwood and many of her contemporaries are writing and are most interested in reading".

Margaret Atwood's myths are usually naturalized, made Canadian, as they are in Eli Mandel and Gwendolyn MacEwen. She has the familiar Canadian identification with animals and a sense of the fierce gods of the place. But Atwood uses her tradition more consciously than most writers of her generation. She taps the central concerns of Canadian culture. Atwood attempts, for better or for worse, and certainly to her immediate advantage with the readers, to clarify what is complex and difficult, to get to the needed point, as she sees it.

The Edible Woman is funny in all aspects. It is most often categorized as a feminist novel, but it is a satirical account of the absurd ways of men and women. It is a successful comic novel. It is skillfully written, shifting easily from first to third person and back to first person from the third to convey the stages of Marian's mental travels, her journey into alienation and out again. In the large context of Atwood's work, and of Canadian literature, consumer society is an aspect of the predatory universe, a universal problem that Atwood doesn't attempt to solve.

Surfacing is about a woman far more desperate and alienated than Marian McAlpin. The atmosphere is correspondingly eerie, because this is a psychological ghost story. The ghosts, the woman's parents, are lost parts of herself that she must recover. She has been numb for years. She claims that she has been married and divorced, abandoning her child, but her encounter with the gods and apparently with the corpse of her father reveals that she has had a traumatic abortion.

Bodily Harm, published in 1981, is Margaret Atwood's fifth novel, a strikingly bold and swift work. *Bodily Harm* is no different from Atwood's previous novels, in that it follows a character trying to break free from her past and grasp onto a brighter and more promising future. And yet, *Bodily Harm* takes this idea a step further, by criticizing and questioning one's own actions

of westernized culture; specifically, the actions of the sweet Canadians, who the novel suggests are just as naive as the young Rennie.

Rennie is a freelance magazine writer. She writes mostly about fashion trends or travel and spends her free time with her boyfriend, Jake. Her life changes dramatically when she finds out she has breast cancer, then has one breast removed. She feels as if she is about to die, as if worms are eating away at her insides.

Rennie's boyfriend pretends to feel nothing about it, but she senses his disgust and their relationship ends. She realizes that she is in love with her surgeon. After all, he has seen a part of her, her inside, which even she herself has never seen. The married surgeon is guilt-ridden and Rennie decides to go on vacation. She ends up on a small island near Grenada. While she is there, a coup breaks out. Rennie becomes a hostage. Upon her release, she returns home. Now, however, she feels lucky to be alive and feels more alive than many around her.

The novel is a poignant description of a woman's experience with breast cancer. The section on the tropical island has a dream-like quality to it. Indeed, it seems to be more of a metaphor than a realistic depiction. Rennie learns to believe in herself. She learns that with effort, she can still live a full life. She is not different than everyone else; everyone will die some day or the other.

She is, in fact, lucky to have learned to pay attention to her life. Rennie's change seems a bit contrived and easy. The book seems to argue that all a woman with breast cancer needs is a change in attitude rather than a clean environment or creative medical options. Nevertheless, attitude may change the way one experiences a situation for which one's attitude is in no way responsible.

The ending is frightfully realistic, and almost unbelievable, almost paving the way for the darker twists and turns of her novels to come. Margaret Atwood's *Bodily Harm* is ultimately an exploration of the lust for power, both sexual and political, and the need for compassion that goes beyond what one ordinarily means by love.

The Atwood protagonist receives strength from the gods of nature, and at the novel's end she prepares to return to society, hoping that she carries the seed of the future, a vision of man and wilderness in harmony, the sleeping giant awakening, the larger consciousness surfacing. The whole novel is based on the narrator's attempt to search for her missing father which becomes a symbolic representation of her search for the self as well as the country's cultural identity.

Threads of various issues and conflicts run through the works of Atwood, and the concern with conflicts involving women and issues related to environment or ecology dominate. As it is well-known to everyone who knows Atwood, she grew in a family with many female members, different from each other in every way. Her mother and her aunts became her role models, each of them in one way. Her mother, who lived alone with her children in the bushes, became a depiction of courage. This proved as the basis for her thoughts about

women and their problems. Exploitation of women is similar to exploitation of nature.

Mankind has influenced the earth and is responsible for changes in the environment. Many visionaries issued early warnings about the limits and consequences of industrial progress. In 1960, Rachel Carson published *Silent Spring* and in 1972, the Club of Rome published *The Limits to Growth*. The undesirable phenomena that have been taking place as a result of this unprecedented growth is environmental degeneration due to industrial agriculture and long-term ecological contamination in the vicinity of industrial sites. Land which earlier supported local population has been used to produce export crops for the First World countries. Much of the land produces export crops and the local people have to rely upon imports for meeting their needs. The money they have to spend on imports is much more than they would have spent upon local production.

The deterioration of the world's environment is the result of human activities that are carried out in the name of progress but their consequences are dangerous. Sustainable development is the revised model to replace unchecked development programmes. This kind of development seeks a balance between the use of resources and the satisfaction of human needs so that the needs of the future generations are also taken care of.

Ecocriticism is the study of the relationship between literature and the environment. Ecocritics and theorists who deal with a piece of literature analyse the role nature plays in that particular work; the differences, if any,

between men and women writing about nature; role of literacy in the conservation of literature; the ways in which environmental crisis is seeping into literature and so on are the other areas of interest.

Ecocriticism has been there since time immemorial, from the time of literature's beginning. People have been writing about their environment, nature, animals and so on, only without a specific name for it. They did not classify themselves or cluster themselves into a group so that their works could all be read as under the same subject. Individual literary theory and cultural scholars have been developing ecologically knowledgeable criticism and theory since the seventies; however, unlike their disciplinary cousins they did not organize themselves into an identifiable group; hence, their various efforts were not recognized as belonging to a critical school or movement.

The beginnings of ecocriticism is often recognized with the organisation ASLE: The Association for the Study of Literature and Environment in 1992 and with the publication of an anthology by Cheryll Glotfelty and Harold Fromm in 1996. As proposed by Greta Gard in her article, *Green Theory & Praxis: The Journal of Ecopedagogy*, the aims of ecocriticism are:

> first, to provide a home, a community, and some academic legitimacy for the work of a new generation of literary scholars who were discovering, discussing, and interpreting literary texts about the environment; second, to examine representations of nature and environmental values in literary texts; third, to explore

the interconnections between nature and culture; fourth, and most important, to respond to environmental problems. (11-12) and most importantly "contribute to environmental restoration, not just in our spare time, but from within our capacity as professors of literature" (xxi) as Glotfelty has observed in the introduction to her anthology.

Capitalism, as everybody can understand, is also one of the major reasons for the ecological crisis. For instance, the nature of the land is changed according to man's needs using tractors and fertilisers. As noted by Fassbinder "Even nature is affected by capitalist discipline. The things of the natural environment are re-ordered by capitalist discipline..." (90).

Ecocriticism is an umbrella term for a range of critical approaches that explore the representation in literature of the relationship between the human and the nonhuman, largely from the perspective of anxieties around humanity's destructive impact on the biosphere. Other terms for the field include 'environmental criticism' and 'green cultural studies', the latter term reflecting the increasing diversity of the field's responsibility as well as its growing interest in representations of urban environments. How critics involved in this area choose to define themselves depends largely on their own position in relation to environmental issues and to their understanding of the implications of the individual terms.

Notwithstanding its broad concern, there is a shared perception within ecocriticism that one is living in a time of environmental crisis that requires him to reassess with some urgency the modes of being in the world. Moreover, there is a general agreement that these modes of being have been, to a large degree, culturally determined. Buell, in an early formulation of the role of ecocriticism, identifies the environmental crisis as a "crisis of the imagination the amelioration of which depends on finding better ways of imaging nature and humanity's relation to it" (2). He believes that the ways in which one has conceived of himself and his relationship with the environment have contributed to the destructive impact on the planet. For Buell the task of the ecocritic is both to unravel and critique the conceptualisations that have been so damaging and to identify traces of those 'better ways of imaging' where they are found. This remains the case for some ecocritics even in the most recent formulations of the movement.

The 1960s are largely seen as the decade that marked the beginning of the kind of environmental consciousness that provides the backdrop to ecocriticism. Although other works emerged in the 1960s and 1970s that were seen as embodying early forms of ecocritical practice, the movement was slow to establish itself. It was not until 1992 that the first professional organisation of ecocritics, the Association for the Study of Literature and Environment, was formed in the USA, followed in 1993 by the founding of its journal, ISLE: *Interdisciplinary Studies in Literature and Environment.*

One of the factors influencing this slow progress was perhaps the uncertainty within the humanities of involving themselves with what was generally perceived to be a scientific problem, the domain of the environmental sciences. Another issue was the difficulty of speaking for the earth itself. Other areas of theory that were gathering momentum in the 1970s such as feminism and post-colonialism had more identifiable means of locating and giving the space for articulation to those voices silenced by dominant ideologies.

The first wave of ecocriticism, especially in the USA, focused on the representation in literature of the world beyond the text, devoting much of its energy to the search for the forms of literary expression which could best convey an environmental message. In the USA the first wave of ecocriticism was predominantly associated with the championing of non-fiction nature writing.

A broader understanding of literature and environment and their role in society as also an understanding of the environmental problems confronting man and man himself as a threat to his own environment is a major focus of study in eco-critical theory. In the contemporary concern on global warming and climate change, eco-critical theory stands out as a boon to social and cultural reform. Earth as the center of attention draws into its fold the countless ecological aspects of life, and ecocriticism serves as a catalyst toward making the earth a greener and cleaner planet.

One of the objectives is an understanding of man, through literature, as an inseparable part of the environment and his ability to alter this relationship while also being susceptible to its influence. As a product of environment the characters in literature are influenced by their surroundings. The influence is implicit or explicit and it may be an integral part of the plot. The shaping influence of environment on humans is undeniable and several evils affecting

the contemporary world like terrorism, drug-addiction, crime and so on can be traced to environmental conditions. Even the revolutions sweeping across some nations in the present time can be better understood from an environmental perspective.

Writers, in general, give importance to people who live inside a house. Many of them do not give importance to the world outside it. The ecocentric writers differ from such kinds of writers in bringing the ecosystem to the centre of their works. They emphasise the importance of nature over man, the relationship between nature and man and also the importance of the conservation of the ecosystem.

One of the reasons that ecocriticism continues to grow as a discipline, as critics have pointed out, is the continued global environmental crisis. Ecocriticism aims to show how the work of writers concerned about the environment can play some part in solving real and demanding ecological concerns. They can at least make some impact in the minds of the readers, which would in turn help to bring about changes in their ways of lives.

Modern people treat nature with cruelty because they view humanity as separate from and superior to nature. The interference of humans in the diversity of nature except for vital needs must be considered unethical. The social and economic structures based on capital accumulation and materialistic conceptions need to be changed. Environment friendly critics like the people who follow deep ecology demand reduction of human population for the

betterment of the environment. To respond empathetically to a given situation, human beings require deep awareness as physical and emotional beings.

In *The Handmaid's Tale*, due to extremely toxic chemical pollutants, people have become infertile and women generally give birth to deformed babies. Environmental imbalance is the reason behind the chaos and turbulence in people's lives. The effect of globalization is clearly visible in Atwood's novel Oryx and Crake. The naturally existing plants and animals are disappearing and new genetically engineered species are taking their place. The global destruction in the form of mass killings by a deadly disease coincides with the assumption that if humans will put excessive pressure on the planet and exploit its resources then the environment may strike back in the form of a deadly disease. Oryx and Crake, The Year of the Flood and Maddaddam are novels that are explained by Atwood in one of her interviews as "simultaneouls". The apocalypse in her two simultaneouls brings forward the need to contemplate on the devastating effects of technology. Nanda in Analysing Ecofeminist Peace Politics in the Selected Fiction of Margaret Atwood remarks: "These works are a kind of forewarnings and emphasize upon the need to take corrective measures for the rejuvenation of peace" (32).

Atwood has highlighted her ecological concern by painting the dystopian picture of society. The dystopia in the novel is representative of the degrading values in the contemporary world. Various activities related to new development practices have proven to be harmful for the environment. The need of the hour is to take proper measures to save the planet from destruction. Atwood, among Canadian writers, has the honour of attracting maximum critical attention from various parts of the world. In 1972, Atwood published her most influential and controversial book *Survival: A Thematic Guide to Canadian Literature*. As said earlier the book, even before its publication, saw a print of about 20,000 copies. Literature, Atwood believes, acts as a mirror to the reader, in her own words "Literature is not only a mirror; it is also a map, a geography of the mind" (SUR 18-19).

Atwood explains in *Survival*:

"Who am I?" is a question appropriate in countries where the environment, the "here" is already well defined, so well defined in fact that it may threaten to overwhelm the individual. In societies where everyone and everything has its place, a person may have to struggle to separate himself from social background, in order to keep from being just a function of the structure. "Where is here"? is a different kind of question. It is what a man asks when he finds himself in unknown territory, and it implies several other questions. Where is the place in relation to other places? How do I find my way around it? (17)

Atwood's writings have always advocated Canadian Nationalism, environmentalism, anti-war and human rights movements, and the power play between men and women. Vevaina and Howeels in the foreword to their book *Margaret Atwood: The Shape-Shifter* have proclaimed that Atwood "has shown an endless talent for surprising her readers with her ongoing experimentalism and her radical challenges to contemporary social myths and fashionable ideologies" (Foreword).

The senseless hurry towards the so called 'development' has put more and more people and animals under its control and pushed the earth to the brink of destruction. Stress should be laid on respecting all forms of life on earth, without forgetting that human beings are the late entrants in the cycle of life.

The 1970s witnessed a sudden rise in people's concern for environment. In the ending months of the 1960s, environmental problems took center stage due to widespread air pollution, and water pollution. In the year 1960, Rachel Carson's *Silent Spring* brought a major shift in people's attitude towards environment. Carson talked about the harm done to the environment by the use of synthetic pesticide in her book. Her writings can be credited with initiating the global environmental movement. *Silent Spring* became a landmark in the field of environmentalism, and American government was forced to ban the use of DDT and other pesticides.

The first Earth Day was celebrated in the United States of America on 22 April 1970 in response to the environmental problems. Many feminists and women writers all over the globe started realising the strong bond between women and nature. They saw strong similarity between the oppression of women and oppression of nature by men. A new wave or the third wave of feminism emerged as ecofeminism, linking feminism and deep ecology.

Atwood was born in a family of doctors and scientists, and spent most of her childhood days in the bush. Obviously she was close with nature and has concern for the environment and ecology. This, too, is reflected in her writings. She is very much worried about the ecosystem and the earth, in general. Most of her novels, *Oryx and Crake, The Year of the Flood, The Handmaid's Tale, Bodily Harm, Life Before Man* and the *Maddaddam* trilogy to be specific, echo the agony of the author. These works come with a warning to the society. Atwood's distress regarding this issue comes out as caution notices in most of her novels, such as these.

In a time of unprecedented human foot prints across the globe disturbing earth's ecology, many intellectuals and scientists are seeking answers to how cultural value orientations might influence attitudes and behaviours associated with the natural environment. Many a time Atwood has argued that she is not against technology as technology is not good or bad in itself, she believes it is human nature which is responsible for the destruction in all forms:

> Science is finding stuff out about the material world and technology is the tools that we make. The tools . . . would be quite different if we were giant intelligent spiders. Making bigger and better domesticated webs, for instance. Making things that spiders like. In terms of things we make, we make these tools because we are the kind of beings that we are. I am skeptical about people. The nature of the tool can change

how we live – for instance, I am sitting here at 6.am in Toronto talking to you over broadband. In earlier eras, I would have written something in cuneiform on wet clay and had it delivered to you on a horseback. The tool is morally neutral. It is not a case of 'is science telling us the truth, or technology bad?' I am more skeptical about human nature, who is in charge of those tools? (Interview Telegraph)

Atwood is one of the post-modern Canadian writers who could see the link between the oppression of women and nature. Nature has always been an integral part of Canadian Literature. Throughout the Canadian literary tradition wilderness has been and continues to be the dominant cultural myth, encoding Canadians' imaginative responses to their landscapes and history as an image of national distinctiveness. Her writings challenge the conventions of literary genres and social dichotomies, providing a rich inter textual layer of crosscultural allusions.

Landscapes described in literary works are not only just about nature, they are, "usually about the poet's attitude towards the external natural universe. That is, landscapes . . . are often interior landscapes; they are maps of a state of mind" (SUR 49). In her article "True North", Margaret Atwood writes that North is always at the back of the mind of Canadians "The North focuses our anxieties. Turning to face north . . . we enter our own unconsciousness. Always in retrospect the journey to north has the quality of dream" (101).

The earth is on a slippery slope. It is on the process of decline just because of the acts of human beings, who consider themselves supreme among all the other beings of the planet. As Margaret Atwood has asked, ". . . *What if*

we continue down the road we are already on? How slippery is the slope? What are our saving graces? Who's got the will to stop us?" (MT 330). The major objective of the present study is to inform the public of the disastrous effects on the green planet if the acts of human beings continue to be the same. Through the eyes of Atwood, who herself does a lot for the good of the environment, the researcher tries to warn the society of their misdeeds, thereby tries to sow in the minds of the readers the importance of preserving earth and its beings.

The research tries to bring to the notice of the people about a few important things that need their immediate attention. It questions about the causes of the disintegration of the planet as told in the novels. If, as told in the novels, nuclear technology, genetic engineering and other kinds of extreme technological innovations go out of hand, what will happen to the green planet? If all or any of the above happens, can education prove to be a key to transform humans so as to save mother earth? Finally the researcher attempts to find out whether literature can impart knowledge about ecological disintegration to the people of the world.

The study aims at helping the public realise their actions and make them refrain from the actions that may cause danger not only to themselves, but also to the whole of the living beings on the earth. It proposes to remind people that it is not humans alone that live on the earth. There are also other creatures which are vital for the earth to move on without any ill- effects. Galt, in one of his essays, says, "... art is uncontrollable and has a habit of exploring the shadow side, the unspoken, the unthought" (19). Therefore, by showcasing the unspoken, the unthought and the shadow side of everything, literature, as it is a part of art, tries to sow awareness about the impending apocalypse in the minds of the people.

The researcher has taken up *The Handmaid's Tale*, (Margaret Atwood's first speculative fiction), *Oryx and Crake*, *The Year of the Flood* and *Maddaddam* for the study and has intended to use them to help people realise what they really have to realise at the moment. The following chapters deal with the above said works of fiction. Each of the novels is dealt with in each of the following chapters. The second chapter, "*The Handmaid's Tale:* A Journey through Repression", deals with the novel as in its title. The third chapter is "*Oryx and Crake*: A Peregrination to an Apocalyptic World", fourth chapter is "*The Year of the Flood*: Not a Remote Future", the fifth chapter is the "*Maddaddam*: A Flicker of Hope" and the sixth chapter is the Summation, which sums up all its previous chapters.

Atwood's vision is as affirming as it is cautionary, and the conclusion of this remarkable trilogy leaves the readers not with a sense of despair at mankind's failings but with a sense of awe at humanity's barely explored potential to evolve.

Atwood's novels are often two-dimensional: first, there is the surveying narrator who tells the retrospective story and comments on it and her present life is narrated too. Second, there is the story of the survival of that character, the surveying narrator's former self. In the course of the narrative, narrators reveal their past and present in fragments, and there are nightmares and dreams that reveal the past traumas. The story is built like a puzzle, from which one weaves a story along with the narrator. Narrative structure in Atwood's novels presents a broken sense of narrator's psyche, and makes the reader emotionally involved.

The traumatic narration exposes the narrator's reliability and mental stability. Narrators admit lying about their lives and the happenings in the novel, to the reader. Atwood's novels have open endings, which in one way tell the readers to keep hope. The narrators come to terms with their unstable lives by narrating and remembering their past.

The ending of the novel is a place where the events of both the novels are brought together. Though the novel as an individual one has a story of its own it creates an urge in the readers to crave for the next and final novel of the trilogy. Howell in the *British Journal of Canadian Studies* comments:

> Atwood has said: 'As far as I'm concerned, life begins with Ecology, and with geography... look at a map of Canada' (Ingersoll 131). I would rather stress the word 'begin' here, for there is life, there is art, and there is complex relation between literature and life which Atwood's fiction explores. Her fiction is 'worldly' in the sense that it pays attention to what is actually going on in the world as she speaks out of her Canadian context. (205)

Atwood has always thought good for the nature and the world. She writes also for the advancement of Canadian literature. But she also writes for the general good of the people.

Robert Anson Heinlein is considered the pioneer of the fiction that tell about the future. He has written a number of books to his credit and *A Stranger in a Strange Land, Time Enough for Love, Elsewhen, Destination Moon* and *Project Nightmare* are a few of them. George Orwell is one of the most popular among this kind of writers. Although his work *1984* is considered a political fiction or a dystopian fiction, it is also a speculative fiction. Most of the events of the book can be seen in the present world or could be seen in the future. It also has some similarities to the events of Margaret Atwood's *The Handmaid's Tale*.

Arvind Adiga is one of the most prominent Indian writers who write a lot about the contemporary India which is getting environmentally ruined because of the capitalist ideologies, and also because of the growing needs of humans.

Isaac Asimov, the Russian- born American author who was among the people who introduced the genre into the literary world. His works like *Nightfall,* the *Foundation* trilogy, *The End of Eternity, Robots and Empire, Nemesis, The Gods Themselves* which won the Hugo award for best novel in 1973, and other novels are considered as his major works in the field.

Ray Bradbury's *Fahrenheit 451*, Yevgeny Zamyatin's *We*, Cormac McCarthy's *The Road, The Unit* by Ninni Holmqvist are the examples of

speculative fiction from around the world. The twenty- first century English literature comes across many books that are considered speculative fiction as writers are well aware of the necessity to inform humans of the dangers that await them if their deeds against nature and their environment continue.

The Handmaid's Tale is set in the near future in the Republic of Gilead, a country formed within the borders of what was formerly the United States of America. It was founded by a racist, theocratic-organized military coup as an ideologically driven response to the pervasive ecological, physical and social degradation of the country.

A movement calling itself the Sons of Jacob launches a revolution and suspends the United States Constitution under the pretext of restoring order, which begins with a staged terrorist attack that kills the President and most of Congress.

Taking advantage of electronic banking, they are quickly able to freeze the assets of all women and other undesirables in the country, stripping them of their rights. The new theocratic military dictatorship, styled The Republic of Gilead, moves quickly to consolidate its power and reorganize society along a new militarized, hierarchical, compulsorily Christian regime of Old Testamentinspired social and religious orthodoxy among its newly created social classes.

The story is presented from the point of view of a woman called Offred. The character is one of a class of individuals kept as concubines for reproductive purposes by the ruling class in an era of declining births. The book is told in the first person by Offered, who describes her life during her third assignment as a handmaid, in this case to The Commander. Intertwined with flashbacks are portions of her life from the beginnings of the revolution, when she finds she has lost all autonomy to her husband, through her failed attempt to escape with her husband and daughter to Canada, to her indoctrination into life as a handmaid. Through her eyes, the structure of Gilead's society is described, including the several different categories of women and their circumscribed lives in the new theocracy.

The novel concludes with a metafictional epilogue that explains that the events of the novel occurred shortly after the beginning of what is called the Gilead Period. The epilogue itself is a transcription of a symposium on Gileadean Studies written sometime in the distant future, and according to the symposium's keynote speaker Professor Pieixoto, he and a colleague, Professor Knotly Wade, discover Offred's narrative recorded onto thirty cassette tapes. They create a probable order for these tapes and transcribe them, calling them collectively the handmaid's tale. The epilogue implies that, following the collapse of the theocratic Republic of Gilead, a more equal society re-emerged with a return of the legal rights of women and also Native Americans. It's further suggested that freedom of religion was also re-established.

When Margaret Atwood's novel *Oryx and Crake* opens, her main character, Snowman, is sleeping in a tree, wrapped in a dirty bed-sheet, trying to survive in a world which has gone horribly wrong. Below him, strange animals called Pigoons and Wolvogs prowl, monstrous hybrids created by human beings who have all but wiped out their own species. Ruined tower blocks are visible in the nearby Pleeblands and, further away, there are wrecked compounds where the elite used to live, work and play.

The climate has changed along with everything else, creating intense heat and sudden storms. Snowman's only protection from the elements consists of a pair of sunglasses with one lens missing, leaving him pathetically vulnerable to the monsters his family and friends have had a hand in making.

His name is an ironic reference to the abominable snowman, a mythic creature remembered from a long-ago North American childhood, and he has adopted it for his dealings with the Crakers, a genetically modified group of people who seem to be the only other survivors of an unexplained catastrophe.

The Crakers take their name from Crake, Snowman's childhood friend, who invented them in a secret experiment to create a new race untroubled by aggression, sexual urges or the religious impulse. They are childish, multicoloured and regard Snowman as their mentor. One of their many traits from the animal kingdom is an ability to purr, sending out a vibration that cures minor infections and wounds received in the inhospitable forest that is seen spreading over the earth.

Dystopian fantasy is not a new territory for Atwood, who has already imagined an alternative version of the future in *The Handmaid's Tale*. That novel described a world in which women were reduced to the status of breeders and denied the most basic human rights, a prophecy that came true not in the West, where Atwood set it, but in Afghanistan under the Taliban. If that novel was a warning about an anti-feminist backlash, *Oryx and Crake* is about another set of dangers facing the human race; with its genetically modified viruses, it is particularly resonant in the present. The story of Snowman, who used to be called Jimmy, is that of a boy growing up at a time of rapid technological innovations. He comes from a privileged family, living in one of the compounds set up by immensely wealthy corporations to protect their employees from the lawless Pleeblands. Jimmy's father worked for OrganInc Farms, the company that created the Pigoons, pigs designed to grow human organs for transplantations. These animals have escaped and run free and, at one point in the novel, Snowman is almost eaten alive by the hybrids his father created.

The novel is about conceit and humans playing god, literally, in the case of Crake, the disillusioned genius whose secret project is responsible for the devastation that now surrounds Snowman. The relationship between the two boys begins at school, where they play violent computer games and watch live executions on TV. In a world anaesthetised to suffering and inequality, they react with apparent indifference to their own family tragedies, the suicide of Crake's father and the disappearance of Snowman's mother, who runs away to join an underground rebel movement.

One of the most impressive features of the novel is how fully imagined this lost world turns out to be, full of details which are at once familiar and strange. Snowman goes on holiday to the Moosonee HelthWyzer Gated Vacation Community on the western shore of Hudson's Bay, watching the genmod coffee wars on TV and spotting his mother in a crowd demonstrating outside the Happicuppa head office in Maryland. It is this sense of projecting current events into the future that gives the novel its power. At the same time, this does not entirely compensate for problems with both narrative and character. Since he is apparently the last man on earth, Snowman has no one to talk to apart from the Crakers, and his everyday existence is a monotonous but not overly difficult struggle for survival.

Oryx, spotted first by Snowman on the web, working as a child prostitute, turns up years later if it is really her, which even Snowman doubts in the Paradice dome. By then, she is Crake's lover and his accomplice, visiting the Crakers and teaching them which plants are safe to eat. Inevitably, Snowman falls in love with her, creating a classic love triangle which can only end in tragedy.

The Year of the Flood is a true science fiction, the dystopian world of the author acquiring depth, color and reality. While *Oryx and Crake* is about the life and manners of the people living inside the compounds, *The Year of the Flood* is about that of the people of the Pleeblands, the part of the world where the commoners live. This novel tells especially the story of the Gardeners, a sect of people who live to propagate green life. They struggle hard in the Pleebs where they live and where they grow a garden on an abandoned roof top.

In a nearby future dominated by corporations like HelthWyzer, in which the state has broken down under its fiscal burdens and environmental damage, humanity is separated in several categories. On top and living in isolated gated compounds and rarely interacting with the outside for fear of contamination, kidnapping or worse, the corps people themselves, then the Pleebs eking out a leaving in the corporations commercial outlets and finally the human refuse, the easily disposable and killed for their organs, protein calories or carbon components. Genetic manipulations and strange new life forms Liobams, enhanced pigs and many more created in labs for various purposes, some more gentle, some not so, are the sight in the novel.

Everything is looked after by the corporate police CorpSeCorps who dole out swift justice using weapons like Sprayguns, being the only ones permitted to be armed with them. For lawbreakers against corporate interests there is usually arrest and torment under the internal rendition acts, followed by killing or occasionally a chance to be a Painballer, whose deaths are recorded for the benefit of the pubic. There are also various groups of green-religious people like the Gardeners or the WolfIsaiahists which are endured and allowed as long as they seem harmless to them.

Familiar and strange, ordinary and imaginative, the world of the two novels as described above comes to magnificent life in so many little details in *The Year of the Flood* that it becomes one of the most important characters of the book; as one knows from the beginning, the world is about to be destroyed by a waterless flood, which kills almost all of the human beings, leaving behind only the animal forms, including the lab created ones and a few Noah like human beings.

The Year of the Flood alternates third person narrative with first person narrative from two such survivors, Toby, a middle aged manager of AnooYoo spa for the rich spoiled corps women, is formerly known as Eve six of the most influential Gardener group led by famous preacher Adam One whose sermons scattered through the book are a big highlight. A young woman in Year Five when she escaped the clutches of her violent boss Blanco to live among the Gardeners, Toby discovers a talent for plants, bees, mushrooms, teaching lifelore and becomes an influential Gardener, while she develops friendship with Adam Two, mysterious tough guy Zeb who is partner of jealous fugitive corps wife Lucerne and stepfather of Ren. Her narrative is the adult one through which the fate of the world unfolds.

Ren who is also called Brenda is currently a trapeze artist and occasional prostitute in the well-known Scales and Tails. Born with the Gardener chronology, so twenty five when the novel begins, one can see the recounting events through her childhood eyes since her mother ran away from her extravagant but restrained position as corporate wife to take refuge with her lover Zeb in the Gardener compound.

Ren meets a Pleeb girl Amanda when she is thirteen, who becomes her best friend and later she meets Jimmy, Glenn also known as Crake and Oryx and it is through her that one has the main connection with Oryx and Crake point of view of the events.

Maddaddam is about characters called Toby, Ren, Amanda, Zeb and some of the Maddaddamites who helped Crake, willingly or unwillingly, in the

creation of the waterless- flood and in the creation of the Crakers. It tells about their wait for Adam One, their leader, to return. However, it is unknown till one point whether he is alive or not. Atwood has given a detailed description about how life will become without any of the manmade technologies. Can humans survive even after the destruction of the so-called inevitabilities of life? Atwood, leaving no leaf unturned, splendidly describes how the people expend their days and whether they struggle for their lives or not.

The story swings between the present and the flashbacks about various important characters of the novel, especially Zeb and his brother Adam. It alternates between the corrupt lives of the pre-flood people and the comparatively impeccable lives of the post-flood humans. The ideal Crakers and the story-telling sessions to keep them from asking unanswerable questions also occupy some parts of the novel.

The novel begins where *Oryx and Crake* and *The Year of the Flood* close, just after most of the human species has been wiped out by a man-made plague. In *Oryx and Crake*, the plague leaves injured protagonist Jimmy to look after the Crakers, a human- like species bioengineered to replace humankind by the man responsible for releasing the disease. In *The Year of the Flood*, Maddaddamites use science to startle the people of the Corporations while God's Gardeners use faith, dedication and commitment to the earth to get ready for the approaching destruction. Toby, a God's Gardener and important character in the second book, narrates the story, in which a few survivors, including the Maddaddamites, God's Gardeners, Jimmy, and the Crakers, traverse a post-apocalyptic world. Toby is reunited with Zeb, her Maddaddamite secret love in *The Year of the Flood*, and the two become leaders and defenders of their new populace. The survivors are a distressed group with rigorously tested self-preservation aids, but they have the capability for love, devotion and selflessness, which could signal hope for the good prospect humanity.

Atwood, in this novel, proposes the importance of all life so convincingly more than the other two novels of the trilogy that the readers can certainly understand that the central purpose of the novel is to spread the importance of conservation of all species that are as important as man. With childlike stubbornness, even the peaceful Crakers request for mythology and resort to deifying people whose motives they can't clearly comprehend. The species that are created for exploitation by the Compounds stroll the earth, some of which are unpromising to man, including the Liobams and the Pigoons. Frightening the people, Crakers, and Pigoons are Painballers, who are former criminals, desensitized in incongruous life-or-death combats. The gentle Crakers cannot fight the Painballers and the Pigoons could do only little when it comes to the weapon- laden Painballers. So the humans, Crakers and the animals, both natural and man-made, are left to fight the Painballers hand-inhand.

Speculative fiction, like all the other novels, is a mirror of life. But this genre of fiction serves as the magical mirror in a fairy tale which has the ability to show people about events that could happen in the future. These novels of

Atwood, as she herself has claimed, are also based on events, which had already happened in some part of the world or have chances of happening in the future. She, through these works, intends to pass on a message to the people of the world that when the tools of science and technology go out of hand, it could bring a devastating impact on the planet earth, which is not only his habitat, but also a home for all the creatures living on it.