CHAPTER – I

Nature as a Cultural Construct in The Glass Palace

Ecocriticism is the result of the realization of the fact that a socio-cultural critique of modernity, colonization and imperialism is inevitably intertwined with environmental and ecological issues. It deals with experience of joy, sorrows, fears, hopes, ambitions, disasters, as reflected in the works of literature, in the light of environmental issues. It believes that all the artistic expressions and experiences are primarily shaped by natural and cultural environment. In the recent decades, various scholars and environmental historians like Alfred Crosby, Ramachandra Guha, Richard Grove, David Arnold and others have pointed to the ecological damage done by the European intervention in various parts of the globe. European urges and attempts to imperialize the other lands and their people, beginning in the 15th and climaxing in the 19th century played havoc with the native environments and its populace.

One of the important features of Ecocriticism is that it sees nature and human culture as interwoven rather than as separate sides of a dualistic construct. Pramod Nayar in Contemporary Literary and Cultural Theory maintains:

Ecocriticism is a critical mode that looks at the representation of nature and landscape in cultural texts, paying particular attention to attitudes towards ‘nature’ and the rhetoric employed when speaking about it. It aligns itself with ecological activism and social theory with the assumption that the rhetoric of cultural texts reflects and informs material practices towards the environment, while seeking to increase awareness about it and linking itself (and literary texts) with other ecological sciences and approaches. (242)

A viable ecocriticism must, therefore, continue to challenge dualistic thinking by exploring the role of nature in texts more concerned with human cultures. This can be achieved by looking at the role of culture in nature and by attending to the nature-focussed text as also a cultural-literary text. Glotfelty in
The Ecocriticism Reader draws the link between nature and culture and views Ecocriticism as:

Despite the broad scope of inquiry and disparate levels of sophistication, an ecological criticism shares the fundamental premise that human culture is connected to the physical world, affecting it and affected by it. Ecocriticism takes as its subject the interconnections between nature and culture. Understanding how nature and culture constantly influence and construct each other is essential to an informed ecocriticism. As a critical stance, it has one foot in literature and the other on land. As a theoretical discourse, it negotiates between the human and the nonhuman. (xix)

An ecocritic that see humans fundamentally as a part of nature will attend to representations of human cultures in all their diverse interaction with nature rather than focusing only on texts that show humans observing nature in wilderness or rural setting. Peter Barry, in an essay “Ecocriticism” in Beginning Theory, calls the outdoor environment as a series of adjoining and overlapping areas which move gradually from nature to culture. He includes ‘the wilderness’ e.g. deserts, oceans, uninhabited continents in area one. ‘The scenic sublime’ e.g. forests, lakes, mountains, cliffs and waterfalls are included in area two. Area three consists of ‘the countryside’ e.g. hills, fields and woods. Area four represents ‘the domestic picturesque’ e.g. parks, gardens and lanes. According to Barry, as one proceeds through these areas, it becomes clear that one moves from what may be called pure nature in the first to what is predominantly culture in the fourth area. The two middle areas contain large elements of both culture and nature. Nature writing focuses on the two middle areas. American transcendentalists writing of the nineteenth century was predominantly interested in area one. The first two areas are preferred settings for epic and saga. These areas put emphasis on relations between human beings and cosmic forces like fate, destiny and the supernatural or divine beings, etc. The last two areas are exclusively cultural based.
Ecocriticism takes, as its subject, the interconnections between nature and culture. Sumathy in *Ecocriticism in Practice* quotes Glotfelty, “Nature and culture do not exclude each other but be tangled with each other in multiple ways” (36). An important characteristic of eco-critical studies is that any discourse on nature will inevitably include cultural connotations because nature and culture are two sides of the same coin. Catrin Gersdorf and Sylvia Mayer in their introduction to the book *Nature in Literary and Cultural studies* remark that, “Nature and culture should be conceived of as a pair of hybridized entities” (14). Hence the inextricability of nature and culture can not be doubted. The account of the relationship between self and nature, nature and culture, evokes important truths about self and society.

*The Glass Palace*, published in 2000, looks back at the colonial period to show the social, cultural, economic and ecological devastation done by European intervention in south Asia. Ghosh withdrew *The Glass Palace* from the competition for Commonwealth Literature Prize. He justifies himself in his letter to the Prize committee and asserts:

> The issue of how past is to be remembered lies at the heart of *The Glass Palace* and I feel that I would be betraying the spirit of my book if I were to allow it to be incorporated within that particular memorialization of Empire that passes under rubric of “the Commonwealth”. (Gupta 242-43)

The novel spans over three generations spread over three interlinked parts of the British Empire; Burma, Malaya and India. It is structured around the intermeshing relationships among four families: The Burmese king Thebaw and Queen Supayalata (deposed by the British in 1885 and exiled to Ratnagiri in India) and their entourage; Rajkumar Raha, a Bengali orphan emigrant to Burma and his descendants, Neel and Dinu; Saya John, a teak merchant, a foundling brought up by catholic priests and his son, Mathew and his family; Uma, the wife of the collector of Ratnagiri and Uma’s nephew, Arjun. Their fortunes are set against a backdrop of stirring historical events— The British conquest of Burma, the
consolidation of the empire in India and Malaya, the first and second world wars – conceived and executed on an epic scale in a time frame ranging from 1885 to 1996.

Ghosh mostly discourses on colonized places, interstitial spaces such as oceans, estuaries, rivers and islands. He frequently uses such locations as settings to scrutinize and critique nationalist accounts of British colonialism and its aftermath. Ethnic and Postcolonial studies have a strong regional emphasis, but they dwell on political or cultural spaces rather than their physical environments. Ecocriticism provides critics of race and ethnicity with a view of how those social constructions relate to larger histories of land use and abuse. Ghosh states that the impelling policies of colonial powers alter the landscapes of annexed bio-regions and economically plunder the communities, forcing people to relinquish their home lands. These people are degraded and moved from one region to another as mere portable possessions.

In this chapter, we will be analyzing Ghosh’s novel *The Glass Palace* ecocritically by focusing on the following themes:

1. Ecological Imperialism Leading to Ecocide
2. Displacements and Homelessness
3. Harmonious Development: A Symbiotic Relationship

**Ecological Imperialism Leading to Ecocide**

In *The Glass Palace*, Ghosh demonstrates the extent of environmental damage caused to the earth on account of colonialism and wars. Through this novel, Ghosh shows how colonialism and wars imperialize and destroy not only people but also the physical environment. This kind of intentional ecological dominance is referred to as Ecological Imperialism. This sort of ecological mastery adopted by colonizers affects the entire planet even today. Ecological imperialism has roots in the anthropocentric worldview. Its overriding impact on the western thought has always been so profound that the resulting environmental policies have altered the fundamental ecological cycles of the planet. The novel shows the huge damage caused to nature and human beings alike as a result of ecological
imperialism. The damage and destruction caused by the human and natural forces to nature is referred as Ecocide. It is the most predominant concern of ecocritics. It is a term that denotes disrupt and disaster of different species in an ecosystem. Glen A. Love in Practical Ecocriticism identifies various modes of ecological disaster that takes place in the physical environment. He maintains:

The disquieting fact is that we have grown inured to the bad news of human and natural disasters. . . . Actual instances of radiation poisoning, chemical or germ warfare, all rendered more threatening by the rise of terrorism. Industrial accidents like that in Bhopal, India, where the death toll lies between 20,000 and 30,000. Destruction of the planet’s protective ozone layer. The overcutting of the world’s remaining great forests. An accelerating rate of extinction of plants and animals, estimated at 74 species per day and 27,000 each year. The critical loss of arable land and groundwater through desertification, contamination, and the spread of human settlement. Overfishing and toxic poisoning of the world’s oceans. (14-15)

In The Glass Palace, Rajkumar, an Orphan Indian boy, accidentally reaches Burma. He is orphaned by a killer fever that claims his parents and siblings. He leaves his village to escape the killer fever and takes up job of an errand boy on a boat “sampan”. In order to repair the boat after sailing up the Irrawady river from Bay of Bengal, the boatowner leads the crew to Mandalay in Burma to find other jobs. In Burma, he is introduced to teak by his mentor, Saya John as a tree, “that had felled dynasties, caused invasions, created fortunes, brought a new way of life into being” (71). The novel begins in the year 1885, when the British forces comprising mostly of Indians, invade Mandalay and the King, with his Queen, accompanied by a small entourage of attendants are forced to leave and settle down in a far flung area in India called Ratnagiri. In Burma, the war starts over some logs of wood between British Timber Company and Burmese court. Their intention is to grab all the teak in Burma. They are side-stepping the kingdom’s custom
regulations and indiscriminately cutting logs. A relatively unknown historical fact that teak provided the motive for British colonization is explicitly pointed out in the novel. Young Mathew, Saya John’s son very innocently tells Rajkumar:

The English are preparing to send a fleet up the Irrawaddy. There’s going to be a war. Father says they want all the teak in Burma. The King won’t let them have it so they’re going to do away with him.’

Rajkumar gave a shout of laughter. ‘Awar over wood? Who’s ever heard of such a thing? (15)

The King of Burma resists to the demands of British timber companies. He is adamant to efface these heretic foreigners and protect the country’s natural resources. These companies carry their complaint to British Governor in Rangoon. As a result, they send a large detachment of troops towards the city and the war is declared. The march of the soldiers towards Burma creates panic and havoc. The serene roads all of a sudden get engulfed by clouds of dust. Ghosh, having an ecological vision, is vigilant about the drumbeat striking the land of Burma, while British soldiers pass towards the city. Setting the ecological tune of the novel, in the first few pages, he writes, “Rajkumar was swept along in the direction of the river. As he ran, he became aware of a ripple in the ground beneath him, a kind of drumbeat in the earth, a rhythmic tremor that travelled up his spine through the soles of his feet” (27).

Ghosh in the novel points to the commodification of nature at the hands of British colonialists. The ecocentric world view changes drastically and dramatically due to European invasion. Not only the socio-cultural fabric of the colonized societies is changed but it results in a cascading effect on the whole environment. An important characteristic of eco-critical studies is its interdisciplinary nature. Any discourse on nature will inevitably include cultural connotations because nature and culture are two sides of the same coin. The novel shows that the British invasion on Burma leads to movements, drastic changes in administration, large scale transfers of goods and services and reconfigurations of
political boundaries. The British imperializes the land and changes everything. Invasion gives them a chance to shape the landscape of Burma in their own way. Burma is forcibly converted into a province of British India. British culture transforms the land of Burma according to its own interests and laws. Burma is changed from a serene and tranquil nation into a bustling commercial hub. Ghosh observes the change and infers:

. . . resources were being exploited with an energy and efficiency hitherto undreamt of. The Mandalay palace had been refurbished to serve the conquerors’ recondite pleasures: the west wing had been converted into a British club; the Queen’s hall of audience had now become a billiard room; the mirrored walls were lined with months-old copies of *punch* and the *Illustrated London News*; the gardens had been dug up to make room for tennis courts and polo grounds; the equisetic little monastery in which Thebaw had spent his novitiate had become a chapel where Anglican priests administered the sacrament to British troops. (66)

The novel establishes how the colonization of people, considered wild, is accompanied by colonization and subsequent commercial exploitation of wilderness. Imperialism not only concerns the devastating effects on the colonized community but includes its adverse effects on the colonized ecology as well. Imperialism has always brought with it deforestation and the consuming of natural resources. In the novel, the British intervention is followed by a bizarre flurry of deforestation. Deforestation is one of the major causes of the environmental degradation. The forests of Burma, home lands for a large species of flora and fauna are erased to make for commercially lucrative plantations. This leads to set up of many rubber and timber factories and industries. By establishing factories and industries, these settlers introduce mechanization and as such exterminate local ecosystems. Glotfelty in introduction to *The Ecocriticism Reader* writes, “The current environmental problems are largely of our own making and, are, in other words, a by- product of culture” (xxii).
Ghosh in *The Glass Palace* shows that the native people are made equal participants in the whole process of destruction. Saya John and Rajkumar are portrayed as facilitators of British teak merchants. Not only human beings but animals are also risked and made equal participants in the whole process of destruction. Saya John and Rajkumar are earning rich profits, ferrying supplies and provisions to teak camps. Ecological degradation due to excessive exploitation of nature is underscored by Ghosh when he refers to the deceptive ways in which Rajkumar and Saya John make money through deforestation. This is what Reuckert calls, “the self-destructive or suicidal motive that is inherent in our prevailing and paradoxical attitude towards nature” (107). The initial felling of the forests is done by elephants. These elephants are trained and handled by owners called *oo-sis*. Ghosh holds Europeans responsible for bending the work of nature on man’s will. Europeans included animals in the rampant process of destruction. Ghosh shows and discusses the animal participation as:

Yet until the Europeans came none of them had ever thought of using elephants for the purposes of logging. Their elephants were used only in pagodas and palaces, for wars and ceremonies. It was the Europeans who saw that tame elephants could be made to work for human profit. It was they who invented everything we see around us in this logging camp. This entire way of life is their creation. It was they who thought of these methods of girdling trees, these ways of moving logs with elephants, this system of floating them downriver. (74)

Rajkumar and Saya John’s son Mathew, establish a plantation and a rubber estate, Morningside, on Penang Island in Huay Zedi in Northern Malaya. Mathew describes Morningside as a monument to wood. He declares that he has build it, choosing the best quality of teak and rubber as he makes Rajkumar send him the best teak from Burma. The already existing plantations are erased ruthlessly for timber and new cash crops like rubber. Ghosh describes Huay Zedi as a changed place now, which otherwise was an area that had once been home to dozens of
small spice gardens, where pepper plants grew on vines. Great demand of cash crop like rubber changes the pattern of forests completely. He presents the landscape as if being oppressed and racked by series of disasters. Huge stretches of land are engulfed with ashes and blackened stumps. Ghosh contrasts the scenic sublime with a postlapsarian, artificial landscape seduced by technology as, “The ground underfoot had a soft, cushioned feel, because of the carpet of dead leaves shed by the trees. The slope ahead was scored with the shadows of thousands of trunks, all exactly parallel, like scratches scored by a machine” (199). In the novel, Elsa, Mathew’s American wife is awestruck to realize this transformation of landscape. Prior to the lay out of the plantation, she found the place beautiful beyond imagination. The wilderness around in the form of dense, towering, tangled jungle fascinated her. Earlier, while walking through that place, she used to get awe of a carpeted nave. Looking up, she could find the tops of the trees, forming a sort of green live ceiling. Now after the transition of the area, she is unable to believe that these slopes of an impassable jungle can be made habitable. She out bursts, “It was hard, almost impossible, to imagine that these slopes could be laid bare, made habitable” (199).

On a trip to Huay Zedi, Dolly, Rajkumar’s wife, while visiting rubber plantation, notices the change in the landscape. She is in a fix whether to call it forest, farm or anything else. She is shocked and disillusioned by the changes in the landscape. The symmetrical rows of rubber trees gives her feeling of monotony rather than the awe usually inspired from wilderness. She observes the change in the landscape and infers:

it was like being in wilderness, but yet not. Dolly had visited Huay Zedi several times and had come to love the electric stillness of the jungle. But this was like neither city nor farm nor forest: there was something eerie about its uniformity; about the fact that such sameness could be imposed upon a landscape of such natural exuberance. (199)
Ghosh establishes how each culture constructs its own world out of the infinite variety of nature. He calls this landscape as a tree filled maze. The skill of human beings and the power of machinery have changed the place. As such, humans destroy nature with the help of advanced technology. Ghosh’s consciousness about such transformations seems to be in resonance to the thoughts of great nature writer, Leo Marx. Marx in *The Machine in the Garden* brings forth the shocking intrusion and pervasiveness of machinery in the pastoral scene leading to its transformation. He writes:

> Within the life time of a single generation, a rustic and in large part wild landscape was transformed into the site of the world’s most productive industrial machine. It would be difficult to imagine more profound contradictions of value or meaning than those made manifest by this circumstance. Its influence upon our literature is suggested by the recurrent image of the machine’s sudden entrance onto the landscape. (343)

Our planet is suffering from human induced ecocide which is a global crisis threatening the existence of multiple life forms including human life. In this context Harold Fromm in an essay “From Transcendence to Obsolescence: a Route Map” very aptly maintains, “Today, man’s Faustian posturing take place against a background of arrogant, shocking, and suicidal disregard of his roots in the earth” (39). Ecocide refers to any large scale destruction of the natural environment or over consumption of natural resources. In *The Glass Palace*, Ghosh brings forth the callousness of timber merchants who are ruthless and unmindful towards earth’s resources. They mercilessly and wantonly chop down the trees. This leads to loss of natural beauty and loss of long run economy of the place. Ghosh fears that the incessant logging might leave the place barren forever. His sensitivity towards the ecocidal exploitation of nature is evident in the following lines:

> This was the season for the timber men to comb the forest for teak. The trees, once picked, had to be killed and left to dry, for the density of teak is such that it will not remain afloat while its
heartwood is moist. The killing was achieved with a girdle of incisions, thin slits, carved deep into the wood at a height of four feet and six inches off the ground (teak being ruled, despite the wildness of its terrain, by imperial stricture in every tiny detail). The assassinated trees were left to die where they stood, some-times for three years or even more. (69)

The passage is characterized by a breathless emotionalism that is prevalent in Ghosh’s writing. His use of words like “killings” and “assassination” clearly highlights his deep ecological concerns and sympathy for these inculpable trees. He skillfully brings out the green concerns in this novel. This whole scene of destruction enumerates the difficulties involved in killing trees. Simple jabs of the knife do not kill trees. The trees grow slowly consuming the earth and rising out of it. They absorb sunlight, air and water for years. Ghosh makes readers watch the slaughter of trees in terror and fascination. This is a fact that indiscriminate chopping down of trees leads to disappearance of vast tracts of forests and destruction and imbalance of its flora and fauna. There are varied species within a forest ecosystem. When this habitat is erased, it leads to their extinction. When a single tree is cut down, not only a single tree is lost, but its impact is felt on every system that the tree supports. Human indulgence in the foolish and irrational act of chopping down of trees leads to destruction and threat to the ecological equilibrium. Ghosh in the novel vividly describes the process of deforestation. He further highlights the scene of brutal assassination of trees as:

That was when the axemen came, shouldering their weapons, squinting along the blades to judge their victims’ angle of descent. Dead though they were, the trees would sound great tocsins of protest as they fell, unloosing thunderclap explosions that could be heard miles away, bringing down everything in their path, rafts of saplings, looped nets of rattan. Thick stands of bamboo were flattened in moments, thousands of jointed limbs exploding
simultaneously in deadly splinter blasts, throwing up mushroom clouds of debris. (69)

Ghosh makes readers feel and hear the sounds of protest of these trees as they fall. Their thunderclap explosions are heard miles away. These trees, when cut down, do not behave like silent victims, but retaliate, yell, cry and make sounds as if they raise slogans. Ghosh’s deep ecological concerns resonate with deep ecologist George Sessions who in “Introduction” to Deep Ecology for the Twenty-first Century views, “To be fully human we must protect and nurture our wildness, which involves bioregional living, intimate contact with wild animals and plants in ecosystems, animistic perceptions, and primal nature rituals” (6). Having a deep ecological vision, Ghosh as such focuses on the intrinsic and inherent values present not only in human but non-human life forms. Ghosh explicates the tortuous course the trees go through. He successfully manages to invoke within the readers the pain of the trees as they are tortured and killed. Christopher Manes in “Nature and Silence” writes, “ecological knowledge means metaphorically relearning “the language of birds”- the passions, pains, and cryptic intents of the other biological communities that surround us and silently interpenetrate our existence” (25). As suggested by Christopher Manes, Ghosh also hints on relearning the language and knowing pain, secrets and cryptic intents of all the biological communities.

Ghosh, in the novel signifies that forests of every kind are important part and parcel of human lives. The frequent reduction of forests is largely contributed by European invasions, encouraging technology and anthropocentric nature of human beings. Aldo Leopold in his essay “Axe in Hand”, poignantly expresses the pathetic situation of forests and deride humans for felling trees:

The Lord giveth, and the Lord taketh away, but He is no longer one to do so. When some remote ancestor of ours invented the shovel, he became a giver: he could plant a tree. And when the axe was invented, he became a taker: he could chop it down. Whoever owns land has thus assumed, whether he knows it or not, the divine functions of creating and destroying plants. (448)
Leopold explicates how planting and cutting trees is driven by economic self-interest. Trees are cut down in abundance as it is considered to be easy way of making money. For sake of their own profit, humans weigh heavily on other non-human life forms. According to Leopold, human beings are trying to raise themselves to the level of God. They on their own will, have started giving and taking lives by mechanization and technological enhancements. They are lost in the anthropocentric arrogance and dominating attitude towards nature.

In the novel, Ghosh asserts that the assassinated trees from forests are left to dry for many years and then the logs from these trees are thrown downstream into rivers of the plains. He is very much conscious of the heaviness of the river Irrawady when the timber-heavy streams of the monsoons debouch into it. His ecological vision makes him see the natural world as inspirited. He exudes a keen understanding that it is not just humans who possess intelligence but this faculty is also found in animals, plants and even in inert entities like stones and rivers. He perceives them as being capable to communicate and interact with humans for good or ill. He presents Irrawady river as furious, seething, gloomy and inflamed as it is made to participate in the process of ecological destruction by facilitating economic greed of timber merchants. He writes:

. . . the impact was that of colliding trains. The difference was that this was an accident continuously in the making, a crash that carried on uninterrupted night and day, for weeks on end. The river was by now a swollen, angry torrent, racked by clashing currents and pock-marked with whirlpools. When the feeder streams slammed head-on into the river, two-ton logs were thrown cartwheeling into the air; fifty foot tree trunks were sent shooting across the water like flat bottomed pebbles. The noise was that of an artillery barrage, with the sound of the detonations carrying for miles into the hinterland.

(120)

Ghosh remarks that a particular season, monsoon is chosen for carrying teak from terrestrial handlers to aquatic handlers. During this season, the
Irrawaddy’s currents are very fast. A human net is strung across the river to capture river borne logs which is a difficult and dangerous art. Once brought to the banks, the logs are anchored and moored. It clearly shows that the profit gained by teak companies is earned at the expense of the nature and human effort. Even children are made to participate in this sort of life risking job. Children are made to keep watch along the banks, while their elders go deep into the water chasing the fast moving currents. They dart between the giant trunks of teak which churn around the whirlpools. These indigenous people take such drastic and risky jobs for the sake of little money as Ghosh writes, “for the sum of three annas per log these swimmers strung a human net across the river, wrestling the logs from the currents and guiding them in to shore” (120). This way the living conditions of these people clearly throw light on the concept of environmental injustice. The novel is full of environmental injustices imposed on nature as well as humans. Human’s utter disregard for ecological concerns and the craving of nature only serves to hit back at them and render them more vulnerable.

Ghosh brings forth a crude reality about the lives of forest assistants posted at teak camps. Company for the sake of their profit put these officer’s lives at risk of great many infections and as such deliberately shorten their life span. They send them camp to camp for months on end, with scarcely a break in between. Saya John in the novel says:

They have at best two or three years in the jungle before malaria or dengue fever weaken them to the point where they cannot afford to be far from doctors and hospitals. The company knows this very well; it knows that within a few years these men will be prematurely aged, old at twenty one. (74)

Furthermore, oo-sis, the handlers of elephants are put to risk all the time. The lives of oo-sis in the timber yards are deplorable. They are constantly in the fear of being trampled by the elephants. Doh Say, friend of Rajkumar sums up many forms in which death stalks the lives of oo-sis. This includes attacks by the Russell’s viper, maverick animals, heavy logs, charge of the wild buffalo. He
further talks about the most threatening thing, the deadly disease, anthrax which is a threat both to elephants as well as their handlers. It is a bitter fact that elephants and oo-sis are made to work in the forests of central Burma where anthrax is common and its epidemic is hard to prevent. An anthrax stricken elephant can attack anything in sight. It can uproot trees and batter down walls, “The tamest cows will become maddened killers; the gentlest calves will turn upon their mothers” (93). In its most virulent forms, this disease kills an elephant in a matter of hours. As such, Ghosh presents it as the environmental injustice where human and animal lives are gambled by imperialists against dreadful diseases for sake of their greed and riches. It is a bitter fact that human beings fail to understand the basic truth that they like other living beings, belongs to the earth and their superiority complex override their feelings for nature. It is pertinent to make the note of William Tucker’s observation in “Is Nature Too Good for Us”:

Our problem is that we are too smart for our own good, and for that matter the good of the biosphere. The basic problem is that our brain enables us to evaluate, plan and execute. Thus, while all other creatures are programmed by nature and subject to her whims…Among living species, we are the only one possessed of arrogance, deliberate stupidity, greed, hate, jealousy, treachery, and the impulse to revenge, all of which may erupt spontaneously or be turned at will. (655)

Ecological imperialism radically alters the entire ecology of the invaded lands. Colonization has ever been a lucrative commercial operation bringing wealth and riches to the western nations through the economic exploitation of the colonized countries. Ghosh brings forth this fact by taking readers to a place called Yenangyaung on the eastern bank of the river Irrawady. This is one of the few places in the world where petrol seeps naturally to the surface of the earth. Yenangyaung is traded by foreigners from France, England and America for the sake of petrol. The foreigners imperialize the native people called twin-zas and their lands by gaining control on their pools and oil wells as the main intention of
ecological imperialism is robbing the other lands of its natural wealth and exploiting its people and resources. In the novel, the exploitation of the area is highlighted as:

Many of Yenangyaung’s pools had been worked for so long that the level of oil had sunk beneath the surface, forcing their owners to dig down. In this way, some of the pools had gradually become wells, a hundred feet deep or even more-great oil-sodden pits, surrounded by excavated sand and earth. Some of these wells were so heavily worked that they looked like small volcanoes, with steep, conical slopes. At these depths the oil could no longer be collected simply by dipping a weighted bucket: twin-zas were lowered in, on ropes, holding their breath like pearl divers. (123)

Prior to the captivity of the area by foreigners, the oil easily seeped from the rocks like sweat. It was easily available in pools and in various places, the puddles joined to form creeks and streams. But then the foreigners imperialize the area and these pools are ruthlessly worked out and narrowed down to deep wells. The above extract of the novel shows that technological enhancements and human greed have alarming implications not only on the environment and the non-human denizens but also on humans. At first, Rajkumar is haunted by such scenes of human exploitation. He is awestruck to watch the twin-zas at work submerged in oil wells. The scene arise unnatural phantom. Afterwards, he becomes facilitator of imperialists by transporting indentured labourers from India to work in these extraction sites. Ghosh presents the condition of workers there pitiful. These people work with their whole family including small children. The task is life threatening as these men have to entirely submerge themselves into the oil wells to fetch oil in buckets. A rope is attached around their waist that is pulled by other family members. As such, human body is used as a pulley. Ghosh points to the fact that, in the blind march of progress, humans not only neglect and kill their environment but ruthlessly pose threats to their own existence. Pointing towards the condition of twin-zas, Ghosh writes, “What would it be like to drown in that
ooze? To feel that green sludge, the colour of insects’ wings, closing over your head, trickling into your ears and nostrils?” (123). As such, he refers to the environmental injustice thrust upon the poor natives by the imperialists as environmental justice affirms the right of all the workers to a safe and healthy work environment.

Engulfed by the devil of technology, Ghosh carefully watches the foreigners attacking the earth of Yenangyaung and laments, “Wooden obelisks began to rise on the hillocks, cage-like pyramids inside which huge mechanical beaks hammered ceaselessly on the earth” (123). The incongruity against ecocide is stressed by Ghosh’s use of metaphors—‘cage like pyramids’ and ‘mechanical beaks’. He fears that the mindless knocking and hammering of the earth can lead to unrestrained dangers like oil spills. He senses and underscores the imminent danger an oil spill could bring to the ecosystem. His concern pertaining to human interface with the earth is synonymous with Barry Lopez who in *Arctic Dreams* published in 1986 takes up issues like oil exploration and drilling with its resultant ill-effects on the land and native cultures. Ghosh raises his voice against ecocide and environmental injustice encountered both by biotic and abiotic entities of that annexed territory.

In the novel, the captivated Queen of Burma foresees a miserable decline of the land of Burma because of the ruthless encroachment of its land as well as humans. She conjectures that Burma would only be left with destitution, ignorance, famine and despair as the main intension of imperialists is to grab all the wealth including the gems, the timber and the oil of the land.

Ecocide means destroying the ecosystem by actions of the human species. Human activities like war and the profligate use of ecosystem’s resources is ecocidal. War’s destruction of life is a stark example of crime against nature. At the very onset of the novel, Ghosh gives details about the different disastrous weapons used by the British force to destroy the land of Burma. They are armed with latest breech-loading rifles and their artillery support consists of twenty-seven
rapid-firing machine guns. This kind of firepower has never before been assembled on Asian continent. He writes:

They are bringing the biggest fleet that’s ever sailed on a river. They have cannon that can blow away the stone walls of a fort; they have boats so fast that they can outrun a tidal bore; their guns can shoot quicker than you can talk. They are coming like the tide: nothing can stand in their way. (17)

The novel demonstrates the environmental damage caused due to wars. In the novel, Ghosh shows how the riots in Burma are followed by casualties numbered in hundreds. All this destruction is followed by war between England and Germany and Japan’s attack on England. Business centers are attacked, many men are killed, railway stations, air planes are attacked with catapult spears. Bombers attack Burma and these attacks are not done blindly but they target the city’s long water front, aiming for its mills, ware houses, oil tanks and railway lines. Ghosh ventilates his agony and pain and presents the horror of the destruction as:

The bombers changed formation as they approached the eastern peripheries of the city, dipping lower in the sky. Their fuselages opened and their cargo of bombs began to descend, trailing behind the craft like glinting, tinsel ribbons. It was as though an immense silver curtain had suddenly appeared over the eastern horizon. The first bombs fell several miles away, the explosions following in evenly spaced rhythmic succession. Suddenly there was a booming sound, several times louder than all the proceeding blasts. From some where in the eastern reaches of the city, a huge cloud of black smoke mushroomed up towards the sky, almost engulfing the bombers. (460-61)

War which is a human act is perceived as an act against nature. The furious exchange of fire and bombardment results in overall destruction of nature and humans alike. Besides the general destruction, the emission of toxic gases due to
bombardments as illustrated in the above extract of the novel has dangerous effects on environment and human health. Ghosh’s illustration of booming sounds and clouds of black smoke are indications of his sensibility about the air and noise pollution. The destruction caused by bombs and bombardments is very huge. Rajkumar accumulates all his possessions and holdings at one place in his timber yard in Pazundaung. Amidst all the bombing, he walks towards his timber yard. On the way, he is horrified to see the extent of the ruin. He finds human bodies blown into pieces. The sight and smell of the dead ones captures his heart. Water sources are hit and every thing appears desolate. Approaching Pazundaung, he finds both sides of the creek blanketed in flames. The walls of his yard are shrouded in clouds of smoke. His life time accumulation is claimed by bombs. His son, Neel gets killed in his own timber yard.

The steady destruction of human and natural world is emphasized by Ghosh in the novel. War which is a human violence caused due to mutual ill will between empires is perceived as an act against nature. The destruction caused by blasts is very huge and enormous. The blasts appear like moving wall of sounds. The combing of the plantation continues ruthlessly. The dripping of the trees continues without any interruption. The whole scene of destruction and ruthless combing of trees highlights ecocidal concerns. Uma’s nephew- Arjun, the commanding officer of Batallion C of British Indian Army, is presented by Ghosh as an eye witness of the destruction:

The first shell went skimming over the tops of the trees, sending down showers of leaves and small branches. But then, slowly, the explosions began to move in their direction. The earth shook so violently as to send the water at the bottom of the trench shooting into their faces. Arjun saw a fifty-foot rubber tree rising gracefully from the earth and jumping several feet into the air before somersaulting towards them. (391)

Apart from natural exploitation, Ghosh details the human exploitation by imperial powers. Rajkumar’s son, Dinu meets Arjun in the forests of central Burma
and is awestruck to see the physical condition of the soldiers. He finds them hungry and pitiable. These soldiers seem to be malnourished due to hunger, with discolourations on their skin all over. He describes Arjun as, “A part of his scalp had been eaten away by a sore; the wound extended from above his right ear, almost as far as his eye. His face was covered in lacerations and insect bites” (516).

Ghosh, in the novel, depicts the ruthless exploitation of human and non-human world leading to over all ecocide. He vividly mirrors the horrible destruction due to colonialism and wars. The impact of the wars leads to apocalyptic images. Apocalypse is the destruction caused to put an end to the earth. Ecocritics are concerned about the revival of nature after its disaster. Nevertheless, Ghosh in the novel shows that the bond between humans and nature continues irrespective of the ecocide.

**Displacements and Homelessness**

The idea of home and displacement has always been important for postcolonial writers. These challenges are explored through alternative modalities of belonging, as well as ecological understandings of the relationship among human beings, the environment that surrounds them, and the other creatures with which they share their world. In *The Glass Palace* Ghosh shows how colonizers force their control on other lands and their people. The annexed people are displaced and moved from one place to another. Ghosh calls these movements furious and beyond comprehension. In the novel, the King on his way to exile, near Rangoon river while crossing the town which is already seized by the British along its coastal provinces, notices many Indian faces. Ghosh presents the plight of the displaced Indians, who are forced to work as slaves for British colonizers. The imperialism of people leads to displacements on a large scale. The exiled king, Thebaw ponders on the force and nature of power of British Empire that is changing fates of thousands across the subcontinent.

Ghosh tackles the issues of inequality imposed on poor, colonized and disempowered people. He does not skip the fact that Indians are transported and as such are environmentally displaced to other lands by colonizers to serve them.
They are made to clean their toilets, fight for them, and are thrust upon with other slavery and life risking jobs. By tackling such grave issues in the novel, Ghosh highlights, how environmental racism is imposed on poor human beings. Environmental racism is a result of the injustices imposed on disempowered and minority communities. Ghosh uses King’s voice to apprise the readers of how the invading government has stepped up pressure on disempowered communities. He writes:

The British had brought them there, to work in the docks and mills, to pull rickshaws and empty the latrines. Apparently they couldn’t find local people to do these jobs. And indeed, why should the Burmese do that kind of work? In Burma no one ever starved, everyone knew how to read and write, and land was to be had for the asking: why should they pull rickshaws and carry night soil? ... What vast, what incomprehensible power, to move people in such huge numbers from one place to another - emperors, kings, farmers, dockworkers soldiers, coolies, policemen. Why? Why this furious movement – people taken from one place to another, to pull rickshaws, to sit blind in exile? (50)

In the novel, the displaced King, Queen and their family along with their entourage who are exiled to Outram House at Ratnagiri in India live as if buried in dungheaps. The house they are made to live in is a run-down and squalid residence. It has become the nucleus of a shantytown because of the enveloping “basti” (locality) of servants, smell of waste and excrement. Ghosh states that the place smells rotten with the stench of the pall of woodsmoke that hangs thick in the air. Nevertheless, he is equally distressed to see that the decomposed waste, night soil of toilets, lack of water pollutes the environment. He pictures a loss of ecological balance and the environmental injustice thrusted upon them.

Ecocriticism focuses on displaced people and environmental racism, which briefly as defined by Buell in *The Future of Environmental Criticism*, refers to the “toxification of local environments and setting of waste dumps and polluting
industries that discriminate against poor and otherwise disempowered communities particularly minorities” (141-42). Ghosh highlights the revolt of human beings and nature against the imperialist venture of the British. *The Glass Palace* remarks the tale of subjugation, resilience and resistance of humans and nature against British colonialism.

From an eco-critical perspective dwelling places are environments to which human values have been assigned, and are, therefore, strongly associated and defined by their connection to human culture. A place with extensible borders and lack of locked doors provide all beings a safe and hidden refuge and results in a sense of intimacy called place-connectedness with their dwelling place. Neil Evernden, a great ecologist in his essay “Beyond Ecology” writes:

> There appears to be a human phenomenon, similar in some ways to the experience of territoriality, that is described as aesthetic and which is, in effect, a “sense of place”, a sense of knowing and of being a part of a particular place. There’s nothing very mysterious about this- it is just what it feels like to be home, to experience a sense of light or of smell that is inexplicably “right”. (100)

In the novel, the last king of Burma is left homeless and thus worthless by imperialists. The forced displacement has produced pathological effects and many harmful disorders to him. Exposing the ill desires of imperialists, Ghosh writes, “They don’t want any martyrs; all they want is that the king should be lost to memory- like an old umbrella in a dusty cupboard” (136). The use of the phrase “dusty cupboard” by Ghosh means a worst possible dwelling place offered to a human being. Ghosh shows how the King is confined to four walls forever. The residence and the surrounding thrusted upon to the king and his family is never accepted by them as their home. They feel homeless all the time and lack connection to the place. Their roots to their ancestral land always haunt them.

Decay has become the Queen’s badge of defiance. She holds the selfish motives of colonizers responsible for their homelessness. Lack of connection to the place leads her to worsen the condition of the place where they live. She plays an
active role in deteriorating the environment of Outram House. The tiles of the house are blown away, plaster is crumbled and through the broken walls, the fatal weeds are coming out everyday. Amidst these sort of polluting surroundings, she murmurs, “The responsibility for the upkeep of this house is not ours,’ she said. ‘They chose this to be our gaol, let them look after it” (87). Ghosh describes homelessness as a sort of defeat that can only be corrected, when the displaced people are comfortably re-habilitated. The displaced masses, like home pigeons, feel out of context, unless they reach their roost. They are carried by a swirling vortex unless they find the place where they fit and feel comfortable. Depicting the defiance shown by the Queen, Ghosh clarifies the fact that it is impossible for any creature in a state of sensory deprivation to form genuine attachments to a place. Buell in Writing for an Endangered World voices his apprehensions, “whether there might in fact be some widespread if not universal compulsion for humans to seek to connect themselves with specific places of settlement” (74). He argues that lack of connection to a place might, “produce in many a pathological effect equivalent to (say) insomnia or seasonal affective disorder” (74).

Ghosh keeps reiterating wickedness of homelessness firmly in the novel. He writes about families and nations to highlight the sense of displacement associated with homelessness and describe the defeats and disappointments of the dislocated people in various places. It is thus essential to sense a connection to a place. According to Buell, “personal experiences of arriving at a place that seems a perfect spiritual fit, even if one has never before set eyes on it, have been recorded by settlers as well as aborigines” (Writing for, 74). This statement sums up Rajkumar’s experience of home in the novel. Ghosh strips off the veils of human nature, and reveals the crude drive for survival that lives even in seemingly innocent hearts like Rajkumar, an eleven year old orphan Indian boy. During the initial stages of his stay in the British occupied Burma, Rajkumar wants to offer resistance to the imperialists but soon he finds it curbed under the apprenticeship of the opportunist businessman, Saya John and he learns the tactics of survival in the colonized space. The protagonist represents the human will to survive as he goes to work in the teak industry and eventually creates a kind of empire of his own. A
displaced and alienated human being has no other choice but to adapt himself to the changed situation. Emboldened by poverty and orphan hood he adapts himself to the changed situation and becomes an efficient teak trader. He becomes a comprador to Europe and engages himself in transporting indentured labourers to work in the plantation and resource extraction sites. Being a contractor in teak trade he emulates the colonizers in logging incessantly from teak forests. Rajkumar experiences a sort of connectedness to the place. He has seen too much in Burma and acquires too many new ambitions. He is both curious and predatory on learning that British invasion is provoked by teak, “If British were willing to go to war over a stand of trees, it could only be because they knew of some hidden wealth, secreted within the forest” (58). Ghosh refers to the fact that in ones life there are many situations when one feels instinctively at home while discovering a place. There is an immediate bond, a sense of place-connectedness. Even if one does not settle down forever in this place one would most likely return to it over and over again. Rajkumar is unwilling to leave Burma even at the time of deadly riots. Perhaps that place is enough for him to heal and let him move on with his life. He claims that he would never feel comfortable in any other place. He conjectures:

It’s hard to think of leaving: Burma has given me everything I have. The boys have grown up here: they’ve never known any other home. When I first came to Mandalay the nakhoda of my boat said: This is a golden land- no one ever starves here. That proved true for me, and despite everything that’s happened recently, I don’t think I could ever love another place in the same way. (310)

The issue of change of habitat shows that man is different from other living beings. Nature and landscape is directly endangered by the change of habitat. Humans are much more mobile and their continual quest for something firm and whole is demonstrated by their participation in other cultures and people. Boundaries and geographical bounds get erased and cultures merge. Nature under these circumstances becomes a cultural construct.
Harmonious Development: A Symbiotic Relationship

Throughout human history, humans have an unbelievable arrogant stance towards nature, believing that they are vastly superior and can tame and dominate it without penalty. In this context, Lynn White, an ecocritic in his essay “The Historical Roots of our Ecological Crisis” points out that Christianity, “not only established a dualism of man and nature but also insisted that it is God’s will that man exploit nature for his proper ends” (10). Ghosh stresses the fact that an enormous amount of human ingenuity is invested to bring about cultural turbulences and changes in nature. He warns human beings not to ignore the powerful forces at work in balance of nature. As the universal fact is that the oppressed and enslaved never submit willingly, so nature also never does. In the novel, Mathew advocates nature’s case of fighting back. Pointing towards the rubber plantation in Malaya, Mathew makes a sweeping gesture with his hand:

This is my little empire, Uma. I made it. I took it from the jungle and moulded it into what I wanted it to be. Now that it’s mine I take good care of it. There’s law, there’s order, everything is well run. Looking at it, you would think everything here is tame, domesticated, that all the parts have been fitted carefully together. But it’s when you try to make the whole machine work that you discover that every bit of it is fighting back. It has nothing to do with me or with rights and wrongs: I could make this the best-run little kingdom in the world and it would still fight back. . . . It’s nature: the nature that made these trees and the nature that made us.

(233)

Ghosh here depicts the rebellious nature of trees. Nature is resisting, fighting back because it has to rid itself of all the human bacteria and parasites who plunder and destroy it simply to fuel their selfishness and greed. If humans pollute the environment and damage or remould the ecosystem, nature will resist and fight back. Harold Fromm speculates:
How the industrial revolution affected humanity’s conception of its relationship to nature, warning that technology has created the false illusion that we control nature, allowing us to forget that our ‘‘unconquerable minds’’ are vitally dependent upon natural support systems. (qtd. in Glotfelty xxvii)

Ghosh in the novel emphasizes that nature is not a docile creature with a single characteristic. It is dynamic and it changes in order to protect itself. Nature simply does what its own laws dictate it. The same fact is depicted in the novel when in the rubber plantation in Huay Zedi, Mathew points towards an empty coconut cup and says:

Botanists will tell you one thing and geologists will tell you another and soil specialists will tell you something else again. But if you ask me, the truth is quite simple...It’s fighting back... ‘you can’t really believe that.’ ‘I planted this tree, Uma. I’ve heard what all the experts say. But the tappers know better. They have a saying, you know- “every rubber tree in Malaya was paid for with an Indian life”. They know that there are trees that won’t do what the others do, and that’s what they say- this one is fighting back. (233)

The above passage establishes the fact that nature does not passively accept abuse, but retaliate to remind its inhabitants that it has a sense willing to strike back when struck. Though Ghosh talks about the exploration of a cultivated land resulting in the discovery of money yielding plantation, his voice is tinged with eco-critical sentiments. He cannot afford to provide economic and technical tranquility and pleasure on cost of human life and nature. He being an ecocritic is watchful towards the inner feelings of the landscape there. It is too dangerous, Mathew says, “like a battle field, with the jungle fighting back every inch of the way” (200). If humans intervene, damage and remould the ecosystem, nature resists and fights back. Ghosh writes,

It’s no easy thing to run a plantation you know. To look at, it’s all very green and beautiful- sort of like a forest. But actually it’s a vast
machine, made of wood and flesh. And at every turn, every little piece of this machine is resisting you, fighting you, waiting for you to give in. (232)

Ghosh proposes that humanity should establish and maintain balance with nature. Humans should start learning how nature works and seek to fit in as a part of a balanced whole, reverencing natures innate intelligence and perfection rather than bulldozing it at their own will. In quest for progress, growth and riches at the expense of the earth, human beings have the upper hand. In the novel, Ghosh characterizes nature in clearer and more defined ways, thus leading human beings to believe that earth is more alive. They definitely need to stop viewing themselves outside nature and separate from it. In this context, Christopher Manes opines:

. . . we must contemplate not only learning a new ethics, but a new language free from the directionalities of humanism, a language that incorporates a decentered, postmodern, post-humanist perspective. In short, we require the language of ecological humility that deep ecology, however gropingly, is attempting to express. (17)

Ghosh introduces a place in Mandalay called Huay Zedi that is entire unto itself, a part of the new cycle of life that has been brought into being by teak. This place has become a hub of timber yards where people as well as animals are busy with extraction and transportation of teak logs. In an episode of the novel at this place, McKay-thakin, a young officer in charge orders to send an oo-si (handler of elephants) along with his elephant down the slope to butt free the obstinate log. This is a difficult task as the slope is very steep and after months of pounding from enormous logs, its surface is crumbled into powder. A young oo-si along with his elephant is summoned and engaged for this task. The inevitable happens and the oo-si is crushed. He is very much loved by his mount, a gentle and good natured cow, ShweDoke. She is utterly disconsolate at the loss of her handler. She gets restless and nervous, frequently flapping her ears and clawing the air with the tip of her trunk. Ghosh here throws light at the sensitive side of the elephant behaviour by stating that elephants are creatures of habit and routine, so this behaviour is
neither uncommon nor unexpected as the absence of a long familiar handler can put even the gentlest of elephants out of temper, often dangerous. Getting a chance, ShweDoke attacks McKay-thakin and crashes him down. She rolls over him in a circular motion as if in a technically perfect execution. He is crushed and mangled almost beyond recognition. A deep study of the episode reveals the revolt of an elephant against the environmental injustice imposed upon it and its human handler. Through this episode, Ghosh portrays and introduces alternative ways of being in and knowing the non-human world. He stresses that animals should not be seen as subordinate or inferior to humans, but instead be regarded like humans, with intelligence, sensitivities and passions. Remarkably this idea is enunciated by a great philosopher and deep ecologist, Warwick Fox and his concept is called “transpersonal ecology”. His basic premise is that a greater respect of nature will necessarily result from a cosmological or transpersonal identification with nature. This happens only when the boundary between the nature and the self is flexible. An American philosopher James Rachels in *Created From Animals* says:

> We kill animals for food; we use them as experimental subjects in laboratories; we exploit them as sources of raw materials such as leather and wool; we keep them as work animals. These practices are to our advantage, and we intend to continue them…if animals are conceived as intelligent, sensitive beings, these ways of treating them might seem monstrous. So humans have reasons to resist thinking of them as intelligent or sensitive. (129)

This is what exactly Joseph W Meeker says in his essay titled “The Comic Mode”. He says that the recent growth of ethology, the study of animal behaviour, shows how even the simplest of creatures follow exceedingly complicated and highly sophisticated patterns of behaviour, many of which continue to defy human understanding. So intricate are the animal rituals that “we are slowly beginning to realize that we have grossly underestimated the animals” (Meeker 164).

Warwick Fox’s idea of creating a flexible boundary between the nature and the self as discussed above actually leads to symbiosis. Ghosh through the novel
puts forth an appeal to live in symbiotic relationship with nature. He sets up himself as an eco-critical writer by questioning imperialism, globalization, western models of science and scientific progress. He advocates symbiosis between human and nature. Taking advantage of one species and use it in a certain purpose is the main definition of symbiosis. Basically, humans cannot live without symbiosis because they need to use plants and animals for different purposes like food and shelter. The entire world is indeed a mysterious place in which one species uses the other to ensure survival. There is no clear cut dividing line between humans and the natural world. Cheryll Glotfelty cites Barry Commoner’s first law of ecology that ‘everything is connected to everything else’ when arguing that “ecocriticism expands the notion of ‘the world’ to include the entire ecosphere” (xix). In the novel, Ghosh points towards the symbiotic relationship existing between human and nature as:

Clusters of yellowish-orange fruit hung from the stub-like trunks, each as big as a lamb. The air was very still and it seemed to have the texture of grease. Between the palms there were bird-houses elevated on poles. These were for owls, Illongo explained: the oil-rich fruit attracted great quantities of rodents; the birds helped their numbers under control. (500)

It is evident from the above passage that symbiosis is an entire process. Plants use insects, insects are used by small animal, animals are eaten by humans and sometimes even humans get eaten by certain mammifers. Everything is connected to a symbiotic relationship sooner or later. In order to guarantee continued existence, humans take full advantage of other species. The most important and noteworthy thing Ghosh wants to convey is that the other animals and insects or living creatures do the same and interact with other species and plants for their survival. Author actually proposes that humanity should establish and maintain balance with the nature.

The study made so far proves, beyond doubt, that literature can make positive contributions towards the awareness of the environment. It offers a
friendly insight into human relationship with the non-human world. It illustrates how humans inflict sufferings on nature, thereby, becoming victims in the bargain. As such, it highlights the correlation or mutual relation between nature and culture. Any discourse on nature will inevitably include cultural connotations because nature and culture are two sides of the same coin affecting as well as constructing each other continuously. Through this text, Ghosh explores the ways depicting how nature affects culture and in turn, culture affects nature.