



Towards Bringing a Change: Creating an Ecocentric Awareness Through Texts of Popular Culture

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Abstract: Earth is home to innumerable number of species of flora and fauna. All of these creatures are part of her rich biodiversity. However this biodiversity is being threatened by human's anthropocentric attitude. As one analyses the relationship between man and nature one could see the rise of power structures wherein he utilizes his strength to suppress other creatures. With the passing of time man has forgotten that for his survival he needs to depend on the environment around him. Thus humans need to shed off their anthropocentric attitude and adopt an ecocentric perspective. Texts of popular culture such as fictional and non-fictional texts, documentaries, magazines based on environmental issues, animated and non-animated films, graphic novels and so on play a substantial role in bringing about awareness among the common masses about the importance of maintaining one's ecosystem. Environmentalists like Jane Goodall, David Attenborough, Jeff Corwin and so on have played a substantial role in voicing out for the safety of endangered species. This paper attempts to advocate the fact that texts of popular culture should not just be considered as sources of entertainment. These texts also have a social responsibility. These play the role of agents that could bring about a change in awareness about the importance of the environment and its biodiversity in the present as well as future generations so that they can preserve the environment.

Index Terms – Environmental issues, Keystone species, Anthropocentric attitude, Popular culture, Anthropomorphism, Documentaries.

Earth is home for innumerable variety of species of flora and fauna. All of these creatures are part of her rich biodiversity. Dame Jane Morris Goodall, the founder of Jane Goodall Institute and one of the most celebrated primatologists and anthropologists, in the text *Gone is Gone*, once said,

It is human actions that have brought about this shocking situation, bringing us into what is known as the Sixth Great Extinction. Habitat destruction, pollution of air, land and water, reckless burning of fossil fuels and the disastrous effects of intensive agriculture have led to shrinking supplies of fresh water- and to climate change. And, in addition to all of this, there is the illegal trafficking of wildlife. We have lost approximately one half of the world's original forests and polluted the ocean- the two great "lungs" of the world, both now losing the ability to absorb carbon dioxide from the atmosphere and give out oxygen. (Goodall, p. vi)

Although humans share global space with various other organisms many of their actions have been disturbing the peaceful co-existence of the other species. Deforestation, oil spills, animal trafficking, selective breeding, pollution of air, water and land, animal trafficking and poaching for enrichment of the leather industry, traditional medicine and so on have induced adverse reactions on the environment.

Rainforests comprise around 6% of the earth's surface. Nevertheless it plays a massive role in providing shelter to 80% of flora and fauna. However studies show a shocking fact that each year around '140,000 sq km (54,000 sq miles) of rainforest' (Fewster, Helen., & Camilla Hallinan. (Eds), p. 238) is getting destroyed. Humans clear up rainforests for various purposes, namely requirement of wood, land for agrarian activities, construction of roads and civil life. Rainforests present in Western Africa, Central America and South East Asia are under severe danger. Rainforests absorb a massive amount of Carbon Dioxide from the atmosphere and releases Oxygen thus making Earth a comfortable place to live. Moreover rainforests also stop soil erosion by absorbing the rainwater like a sponge. Thus, this stops soil from eroding and thus eliminating the threat of environmental hazards such as landslides and floods.

Coral reefs comprise around 25% of the earth's marine eco-system. These also serve as a support system for the world's aquatic bio-diversity. However the existence of coral reefs is also under threat.

Coral reefs are important ecoregions and yet are especially endangered.

They support 25 per cent of the planet's marine species, and are also nurseries for billions of fish. Two-thirds of the world's reefs are under

threat, and about a quarter of them are likely damaged and beyond repair. Possibly the biggest threat to coral reefs is increased acidity caused by a greater uptake of CO₂ from the atmosphere. This impedes the ability of many sea creatures to build their shells, and induces coral “bleaching”, which is a step on the way to the reef dying. In addition, coral reefs are being destroyed by overfishing, and by harmful practices such as cyanide and blast fishing, and bottom trawling. Sediment resulting from coastal development blocks the sunlight that reefs need. Chemical pollution, coral mining, and careless tourism all add to the burden on this highly sensitive habitat. (Fewster, Helen., & Camilla Hallinan. (Eds), p. 238)

Industrialization and urbanization have gradually been casting adverse effects upon forests, mangroves, prairies, grasslands and water bodies such as rivers and lakes. Residues released by industries during the production of fertilizers and pesticides have been polluting water bodies and expansion of coastal areas have been bringing an end to mangrove forests. Nearly 35% of mangroves have been wiped off because of coastal expansions. Thus earth’s biodiversity is being threatened by human’s anthropocentric attitude. Humans need to shed this anthropocentric attitude and adopt an eco-centric attitude so that earth, her biodiversity as well as mankind’s existence doesn’t get threatened. Texts of popular culture such as films, documentaries, books, advertisements, video recordings, photographs, journals, magazines based on environmental issues, web series and many others have played a substantial role in spreading ecological awareness about the need for humans to develop a deep inclination towards safeguarding the environment and earth’s biodiversity. Environmental activists as well as biologists like Sir David Attenborough, Jane Goodall, Dian Fossey, Jeff Corwin and Steve Irwin to name a few have effectively made use of such texts as a powerful medium in order to voice out their concerns about the welfare of animals, plants and various other species. Film makers as well as writers of fiction have exposed many of the issues that creatures in the non-human world face. Most of the non-human characters in these films and fictional works are anthropomorphic. ‘Anthropomorphism’ refers to the act of imbibing traits in non-human characters. Film makers as well as writers prefer to use anthropomorphism in order to portray their characters in the work, probably because these characters catch the attention of the audience easily. Hence they verbalize their thoughts and ideas through these characters. Through various animated and non-animated films Hollywood has presented the world of animals in an extremely entertaining way with the help of anthropomorphism. Each of these films project the world of animals tactfully by juxtapositioning information and entertainment. Walt Disney’s *Dumbo*, *The Jungle Book*, *Homeward Bound: The Incredible Journey*, *The Lion King*, *Finding Nemo*, *Eight Below*, *Bolt Finding Dory*, *Zootopia*, DreamWorks Animation’s *Antz*, the *Madagascar* series, the *Kung Fu Panda* series, *Spirit: Stallion of the Cimarron*, *Shark Tale*, *Over the Hedge*, *Bee Movie*, *Turbo* and so on are some of the most memorable films which have presented the world of animals by weaving fiction along with factual presentation about the world of each animal. Through engaging narratives the fictional characters in each film succeed in expressing the various problems and threats that each animal faces in the real world.

Sir David Attenborough once said, “Cherish the natural world because you’re part of it and you depend on it” (philharding.net, 2020). In the animal world creatures live in a harmonious co-existence with their surroundings. The American biologists Paul Ehrlich and Peter Raven, through close study came up with the term “coevolution”- the evolution of two or more species that effect each other reciprocally’ (Fewster, Helen., & Camilla Hallinan. (Eds), p. 59). An example of species living in mutual co-existence with its environment is the clown fish and the sea anemone. The clown fish is the only sea creature that can come into contact with an anemone. The clown fish helps the anemone by keeping it clean as the clown fish’s food consists of algae and other food particles that are found on the anemone. The anemone’s tentacles normally sting all other creatures except for the clown fish. The body of the clown fish is coated by a layer of mucous which makes it immune to the stings. Similarly flowers depend on bees and other insects for pollination.

The term coevolution was coined by American biologists Paul Ehrlich and Peter Raven in 1964, but a century before the word existed, the naturalists Charles Darwin and Alfred Russel Wallace were already aware of the concept, not least through their observation of orchids. Like many other plants, orchids rely on insects to pollinate them. Some have extraordinary structures in which to hold nectar and pollen. To lure the insect pollinators, the plants offer them a drink of energy- giving nectar. This fascinated Darwin, who was given a specimen of the Madagascar orchid in 1862. The flower stores its nectar in a hollow spur nearly 30 cm(12 in) long. Darwin and Wallace speculated that only a large moth could have a proboscis long enough to reach the nectar- a theory eventually proven in 1997. If the orchid’s spur were shorter, a moth could drink without picking up pollen and so would not pollinate the flower. If the spur were longer, a moth would not visit. (Fewster, Helen., & Camilla Hallinan. (Eds), p. 59)

Some species of creatures which are known as the ‘keystone species’ (Spilsbury, p. 15) could be considered indispensable for the ecosystem since various other animals depend on it for their survival. The National Geographic Society groups keystone species into three types, ‘predators, ecosystem engineers, and mutualists’ (nationalgeographic.org). Keystone predators prey upon weaker animals. Thus by doing so the number of those animals are kept under check. These predators include wild cats like lions, tigers and jaguars. The sea otter is another keystone predator. Sea otters help in maintaining kelp forests by feeding upon sea urchins. Sea urchins are one among the biggest threats for kelp forests since they feed on kelps. The sea otter in turn feeds on the urchins. The wolf is an ‘apex predator’ (The Mysterious World, 2020) which has been instrumental in resurrecting the biodiversity in Yellowstone National Park. ‘An apex predator is a predator that exists at the very top of the food chain’. (Dictionary.Com, 2020) Komodo Dragons, the Snow Leopard, the Salt Water Crocodile, the Golden Eagle, the Polar Bear, Lions, the Great White Shark, Tigers and Killer Whale are some of the notable Apex predators. ‘Apex’ means pinnacle or the topmost position. Thus apex predators refer to those animals who are on the top of a food chain. There are no predators above them who prey upon them. Instead there are other animals who serve as prey for them. These animals form a part of the respective

food chain. If the apex predators cease to exist the population of these animals will rise to an uncontrollable extent. If this happens then these animals will feed upon natural resources, thereby exhausting it, thus causing an imbalance in the ecosystem.

The Green Leatherback Sea Turtle is also a keystone predator as it feeds on jellyfish, thereby keeping the population of jellyfish under check. 'Keystone mutualists are two or more species that engage in reciprocally vital interactions. The disruption of one species impacts the other and, ultimately, the ecosystem as a whole' (Keystone Species 101, 2020). Keystone mutualists include honey bees. Honey bees serve as the chief vehicles for pollination. Pollination is essential for procreation in plants. It is when bees transfer pollens from the male organ in one flower, the stamen to the female organ in another flower, the pistil that the seeds fertilize. Apart from honey bees, birds and bats too play the role of keystone mutualists. Keystone engineers refer to 'Any organism that creates, alters, maintains, repairs, or destroys a habitat is known as an ecosystem engineer' (WorldAtlas, 2020). Through repair, alteration, or destruction of their habitat certain creatures help in stabilizing the environment for other animals, birds, insects and organisms. There are two types of keystone engineers, 'allogenic engineers' (WorldAtlas, 2020) and autogenic engineers (WorldAtlas, 2020). Allogenic engineers upcycle or recycle waste materials in the environment, thereby creating useful objects for our environments bio-diversity. The beavers are fantastic keystone engineers. They gnaw through trees and collect leaves, twigs, branches and roots from the rivers. They use these to form dams within the rivers. These dams help in filtering out the water and also help in restricting floods and droughts. Thus beavers play a great role in keeping the eco-system balanced. Autogenic engineers transform the environment by transforming themselves. Trees are excellent autogenic engineers. As a plant grows from a sapling into a tree its roles increase. It acts as a filter for the environment by absorbing carbon dioxide in the environment and releasing oxygen. It also acts as a life source for various living species. The branches and trunk act as a source of shelter for various creatures. The fruits that the trees bear serve as food for humans as well as non-human creatures. The roots help in strengthening the soil and preventing soil erosion. The flowers interact with bees, thereby giving way to pollination. Thus keystone predators, mutualists and engineers are instrumental in helping animals, birds, plants and various other creatures live in a healthy co-existence. No creature can survive in isolation. Keystone species could be perceived as nature's message to human beings that one shouldn't underestimate the importance of a certain species. When a keystone species gets wiped out from earth various other species start suffering since their routine and habits depends heavily upon them. Not only non-human creatures but humans too depend on keystone species. However many of them often tend to forget this fact.

Humans too have the capability to become allogenic engineers as they too have been involved in various activities which have benefited other species too. Converting cow dung into biogas, harvesting rain water, harvesting solar energy through panels for creating electricity and so on are exemplary of their skill for recycling and upcycling natural resources in order to create products that are of immense utility value. Agrarian activities benefit humans as well as other non-human species as these can also feed the crops.

The element of power has a very big role to play when it comes to analysing the relationship between humans and nature. As one analyses the relationship between man and nature one could see the rise of power structures wherein he utilizes his strength to suppress other creatures. With the passing of time he has forgotten that for his survival he needs to depend on the environment around him. Humans and apes share a common ancestry. With the passing of time man evolved into becoming more advanced than other apes. However, simultaneously, he began to develop an anthropocentric attitude wherein he started manipulating nature and her elements for his own benefit. Thus nature became the subaltern while humans became the suppressors. However, he forgot that his roots are similar to that of apes and that animals, birds, plants and other living creatures are far more advanced than him in many other ways. He also forgot the fact that in order to survive he needed to live in peaceful co-existence with nature and her rich biodiversity. Thus he needs to shed his anthropocentric attitude and opt for an ecocentric attitude. The British zoologist, Desmond Morris in his seminal work, *The Naked Ape: A Zoologist's Study of the Human Animal* (1967) has made a comprehensive comparative study of the behavior of humans and animals in order to substantiate the fact that man isn't superior to other animals. Morris traces man's journey through evolution from being an ape who dwelt in the forest to becoming a 'naked ape' (Morris, p. 13). According to Morris, unlike the other animals and primates man adapted himself to civilization.

This brings us to the last million or so years of the naked ape's ancestral history, and to a series of shattering and increasingly dramatic developments. Several things happened together, and it is important to realize this... The ancestral ground-apes already had large and high-quality brains. They had good eyes and efficient grasping hands. They inevitably, as primates, had some degree of social organization. With strong pressure on them to increase their prey-killing prowess, vital changes began to take place. They became more upright- fast, better runners. Their hands became freed from locomotion duties- strong, efficient weapon-holders. Their brains became more complex- brighter, quicker decision makers... A hunting ape, a killer ape, was in the making. (Morris, p. 14)

As man became more civilized he felt the need to settle down thus leading to the creation of settlements and working in a group. By doing so the area of work and duties also started getting allotted to males and females. The males started becoming the bread winners of the house whereas the females started taking care of the household chores which included cooking and taking care of the children. The males also began to domesticate other animals for various purposes. They needed animals either for food or agrarian purposes or as a companion while venturing out for hunting.

However as he became more developed he began to forget the possibility of other creatures being more superior than him in various other fields. Compared to humans the sensory organs of other animals are far more developed. Their auditory sense organs as well as their sense of sight and smell are also far superior than humans. Felines such as lions, cheetahs, leopards and tigers and canines such as dogs can run much faster than humans. Their limbs are accustomed to cross over difficult terrains within a short span of time whereas humans needed much more time for their body to develop so that they could walk upright and become independent rather than depending on their parents. Morris writes,

As the battle was to be won by brain rather than brawn, some kind of dramatic evolutionary step had to be taken to greatly increase his brain-power. What happened was rather odd: the hunting ape became an infantile

ape. This evolutionary trick is not unique; it has happened in a number of quite separate cases. Put very simply, it is a process (called neoteny) by which certain juvenile or infantile characters are retained and prolonged into adult life...

The way in which this process of neoteny helps the primate brain to grow and develop is best understood if we consider the unborn infant of a typical monkey. Before birth the brain of the monkey foetus increases rapidly in size and complexity. When the animal is born its brain has already attained seventy per cent of its final adult size. The remaining thirty per cent of growth is quickly completed in the first six months of life. Even a young chimpanzee completes its brain- growth within twelve months after birth. Our own species, by contrast, has at birth a brain which is only twenty-three per cent of its final adult size. Rapid growth continues for a further six years after birth, and the whole growing process is not complete until about the twenty-third year of life. (Morris, p. 22)

Hence it necessary for humans to realize that animals are also at par with them in many aspects. Thus humans need to shed off their anthropocentric attitude and adopt an ecocentric perspective.

Popular culture refers to 'the set of practices, beliefs, and objects that embody the most broadly shared meanings of a social system. It includes media objects, entertainment and leisure, fashion and trends, and linguistic conventions, among other things'(oxfordbibliographies.com, 2020). Whatever appeals to the common masses are a part of popular culture. Popular culture could be used as an excellent tool by artists in order to communicate along with the common masses. Texts of popular culture such as fictional and non-fictional texts, documentaries, magazines based on environmental issues, animated and non-animated films, graphic novels and so on play a substantial role in bringing about awareness among the common masses about the importance of maintaining one's ecosystem. This paper will attempt to focus on some of the documentary films which have played a substantial role in order to bring a change in the perception of the common masses towards some of the burning issues that are affecting our environment and its biodiversity.

The National Geographic society which was established in 1888 has been among the forerunners for creating programs in order to raise environmental awareness. It is a non-profit organization which has been working for creating public awareness about various issues related to conservation of the environment as well as those places and artifacts of historical importance. The organization has also conducted key studies in the fields of geography and other social sciences. It has gained critical acclaim primarily for its magazine and its television channel, both of which have gained iconic status. Apart from these National Geographic has also produced some of the most notable films on various environmental issues. Some of the films produced by the National Geographic Society that aim in creating a global awareness about preservation of the animal world are the *March of the Penguins*, and *Arctic Tale* and *The Last Lions*. *March of the Penguins* was a French feature film which was directed by Luc Jacquet. It was co-produced by Bonne Pioche and the National Geographic Society and it was released in 2005. The film focuses on the life and journey of the Emperor Penguins. The film was shot around Dumont d'Urville, a scientific base which is located in Adélie Land, a French territory in Antarctica. The film traces the difficulties that the penguins have to face during their journey as chicks and also as adults such as surviving adverse weather conditions and confronting predators. The *Arctic Tale* was directed by Adam Ravetch and Sarah Robertson and released in 2007. The film which has been produced in documentary style traces the story of a female polar bear named 'Nanu' and a female walrus named 'Seela'. Throughout the film the lives of Nanu and Seela run parallel to each other. Both of them belong to same world, the only difference being that Nanu lives on land and Seela lives in the water. Both of them share similar experiences. They have to fight against the changing climatic conditions. Both of them face the problem of survival. The film intends to highlight the impending dangers of global warming and the intensity of its impact over the Arctic ice and the animals that survive in the region. The plot of *The Last Lions* was set in Africa. It was directed by Dereck and Beverly Joubert and released in 2011. The entire film was shot at Botswana in the Okavango Delta. The film deals with the social issue of the decline in the population of lions globally. The film employs a documentary style of narration in order to trace the story of the protagonist Ma di Tau, a lioness who fights against nature and other predators in order to protect her cubs.

Similar to the National Geographic Society many other film makers and organizations have also produced documentaries that have championed the need for conservation of biodiversity. The Oceanic Preservation Society produced the documentary *Racing Extinction* which associated human activities to animal extinction. The film was directed by the Greek-American photographer Louie Psihoyos and it was released in 2015. Some of the other films which could come under the same category are *Earthlings* which was directed by Shaun Monson and released in 2005, *Chasing Ice* which was directed by Jeff Orlowsky and released in 2012 and *Cowspiracy: The Sustainability Secret* which was directed by Kip Andersen and Keegan Kuhn and released in 2014. All of these films successfully associated the negative aspects of human activity along with threats that animals face such as slaughter, poaching for enrichment of the fashion and leather industry and scientific experiments.

Many documentaries have raised awareness about the effects of stress that animals undergo when they are held in captivity. Circuses, zoos and theme parks act as agencies for keeping animals captive. Dr Chris Draper has been heading Born Free, a charitable organization which aims in ensuring that animals should live in the wild rather than be kept in captivity. According to Dr. Draper, "The damage was done when that animal was brought in from the wild in the first place; it is dangerous to assume can could be released without just adding to the misery"(www.bbcearth.com, 2020). Breeding animals in captivity has its own share of advantages and disadvantages. Wild animals have been kept under captivity for breeding so that they can breed and live within a safe environment. Some of the animals have responded to captive breeding in a positive way. The Californian Condor is one such species which survived extinction mainly due to being bred in captivity. During 1987, Californian Condors had nearly reached extinction. The main reason for their death for accidental ingestion of lead which was present in carcasses of other animals. The authorities of the San Diego Wild Animal Park and the Los Angeles Zoo saved all of the remaining Condors. Through captive breeding, by 2005, the population of Condors rose from 20 to 100. Moreover the authorities also succeeded in releasing many of the Condors into the wild. However the act of captive breeding has called for criticism. Many of the animals who have been bred in captivity face great problems in getting used to living in the wild. In the wild they learn to survive and

provide for themselves. However, in zoos they are fed and looked after by humans. Thus this leads to delay in adjusting to the wild atmosphere if they are released in their natural environment. The atmosphere within zoos have been vehemently criticized.

Some people argue that zoos have got a big problem. They are primarily tourist attractions that are out to make money- and the animals that attract visitors are not necessarily the ones that need urgent conservation. Most zoos claim that their breeding programs and other work are actively helping conservation of endangered species. Yet, nine out of every ten species kept in UK zoos, for example, are not threatened- in fact, a quarter of these zoos keep no threatened species at all. (Spilsbury, p. 36)

The narratives of films like *The Cove*, *Blackfish* and *An Apology to Elephants* have dared to expose the shocking truth about the trauma that animals face when they are held in captivity. *The Cove* which was produced by the Oceanic Preservation Society in 2009 and directed by Louie Psihoyos narrates the horrific true story about the capture and slaughter of dolphins in Taiji, Japan. *Blackfish* was directed by Gabriela Cowperthwaite and released in 2013. The film narrates the true story of Tilikum an Orca whale who was bred at Seaworld, Orlando, Florida. The film exposed the brutal reality behind killer whales being kept under captivity merely for the sake of entertainment. Captivity could change the nature of such creatures whereby they could even go to the extent of attacking humans who try to get involved with them. *An Apology to Elephants* which was directed by Amy Schatz and released in 2013 narrates the truth about the lives of elephants in zoos and circuses and how they are forced into coping up with unnatural working and living conditions.

Environmentalists like Jane Goodall, David Attenborough, Jeff Corwin and so on have played a substantial role in voicing out for the safety of endangered species. The American biologist and conservationist, Jeff Corwin has been an inseparable part of various documentary series as well as several expeditions to various countries across the globe in order to help in conservation of various endangered species. His work *100 Heartbeats: The Race to Save Earth's Most Endangered Species*(2009) is a testimony of his relentless efforts in order to protect a vast number of endangered species such as the gray wolf, the red wolves, the harpy eagle, alligators, the Asiatic one-horned rhino and so on. Corwin says,

The animal kingdom is in a critical condition. The affliction isn't a disease, but rather a crisis of endangerment that threatens to wipe out many of the world's animal species forever.

Ironically, the only species capable of saving these animals is the same one that's responsible for putting them in danger. The plight of the 16,928 species threatened with extinction is largely due to devastating man-made ecological changes such as habitat loss, pollution, climate change, and unsustainable exploitation. (Corwin, p. xi)

Corwin along with environmentalists Goodall, David Attenborough, Dian Fossey and many others have served as crusaders for safeguarding the unheard voices of non-human beings. They have utilized texts of popular culture such as videos, photographs, audio clippings and books as tools in order to learn about the animal world and empathize with their painful experiences. These advocates of the animal world have played a significant role in inspiring other film makers and environmentalists to create powerful documentaries about the various issues in the animal world.

This paper attempts to advocate the fact that texts of popular culture should not just be considered merely as sources of entertainment. These texts also have a social responsibility. These play the role of agents that could bring about a change in awareness about the importance of the environment and its biodiversity in the present as well as future generations. By doing so these texts and the creators succeed in creating a world where humans and animals can co-exist in a healthy environment.

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