

Uchchaihshravas of the Times: The Extension of the Horizon of Postcolonialism

Dr. Panchali Mukherjee¹

ABSTRACT

Postcolonialism is not only a period in the history of time but a movement in the domain of art and aesthetics as well as a literary theory. The basic foundation of this theory aims to restore the rights of the oppressed. Postcolonialism has been in existence since 1920s and 1930s. It is a multi-faceted theory which takes up social, political, cultural and economic causes leading to oppression. The birth of Postcolonialism is from the womb of colonialism and imperialism. Its significance lies in the fact that it is a theory of resistance towards hegemonic practices related to power. In the contemporary times, many literary critics arrived upon the conclusion that the heydays of Postcolonialism have ended and it is a dying theory which is gradually losing its importance in the academic circles. The truth about this theory is that it will never lose its currency as it deals with oppression and exploitation and is about the resistance to oppression. In actuality, oppression or for that matter exploitation never ends, the nature of oppression or exploitation changes and so do the strategies to counter them. The theory has been extended to new domains especially to the domain of Science which had been included in the ambit of Postcolonialism. The critical piece discusses the kind of oppression and exploitation that is practiced in the field of Science through discrimination and hence, the need for a critical theory, that is, Postcolonialism which is interdisciplinary in nature and can voice the concerns of those who bear the brunt of a very specialized and a subtle form of oppression caused due to discrimination. On the other hand, Postcolonialism is able to extend its horizon thereby bringing in interdisciplinarity in its domain. The fact that there is a kind of interdisciplinarity in the field of research makes the critics explore new avenues to project the overlap between the fields which are polar opposites in terms of their epistemology thereby giving rise to an organic whole of which each discipline is a part. The novelty of the essay lies in subverting the grounds on which discrimination is based in the field of Science using an indigenous religious and cultural approach.

Keywords: *Colonialism, Postcolonialism, Hegemony, Interdisciplinarity, Speciesism, Robotism, Environmentalism, Indigenous Religious and Cultural Approach.*

¹ **Dr. Panchali Mukherjee**, Associate Professor, Department of Arts and Humanities, Christ Academy Institute for Advanced Studies, Affiliated to Bangalore University.

Introduction

“Postcolonialism” exhibits multiplicity of meanings as it is a period in the history of time which succeeds the age of western colonialism and imperialism, it is a literary or a critical discourse that voices the concerns of the dispossessed or the exploited or the marginalized and it is also a platform to launch crusades against the hegemonic practices of power. The era of postcolonialism is marked by the inversion of the power pyramid where the oppressor occupies the center of power in relation to the oppressed who are at the margins or at the periphery of any power structure. The postcolonial historical period is characterized by independence of the colonies from the clutches of the colonizers and the imperialists thereby ending the oppressive and the exploitative practices of colonialism and imperialism leading to the physical and the psychological decolonization of the colonized population. Sometimes the psychological decolonization precedes the physical decolonization. This period further emphasizes on the assertion of the identity of the ex-colonized population who have recently gained political independence. It exhibits nationalism which is worn by the ex-colonized population as a panoply of honor. In the context of this essay, the interest in the historical era of postcolonialism is not in the known characteristics of the era but in a niche area, that is, of Science which though has been explored and brought under the umbrella of postcolonialism, the literary theory, but it has been done from a western perspective. Since it is about postcolonialism so the subversion of the discrimination at work should be from an indigenous perspective in addition to the subversion being done from the western perspective.

The era of postcolonialism in the domain of Science signifies scientific inventions made by the colonized population in the pre-colonial times or even during colonial times such as the development and the use of rockets since the 13th century by the Chinese to protect themselves against the Mongol invaders, their use by the Mughals on the battlefield and the experimentation with the rockets by the Europeans not until the 15th century.² These rockets were built of cardboard and were not very effective in inflicting damage on the enemy. The development of the prototypes of sturdier explosives-filled rockets by the 18th century Indian ruler Hyder Ali and the further refinement of Hyder Ali’s innovation by his son Tipu Sultan who had planned, designed and crafted cylindrical iron tubes that brought about greater compression of the filled gunpowder that resulted in providing greater range about that of 2 kms. Tipu Sultan fastened them to swords or bamboo poles that would give them better accuracy. The Mysorean rockets were used by Tipu Sultan in the Anglo-Mysore wars of the 1700s.³ The colonial enterprise had continued on the basis of the fact that the western civilizations were superior to the ancient civilizations which were living since ages on the face of the Earth. The claim to superiority is on the basis of the fact that the western civilizations are more advanced in Science and technology as compared to the ancient civilizations but in

² Pal, Sanchari. “The Story of Tipu Sultan and His Mysorean Rockets, the World’s First War Rockets.” *The Better India*. 26 October 2017. 1 May 2020 <https://www.thebetterindia.com/119316/tipu-sultan-mysore-rockets-hyder-ali-first-war-rocket/>

³ Pal, Sanchari. “The Story of Tipu Sultan and His Mysorean Rockets, the World’s First War Rockets.” *The Better India*. 26 October 2017. 1 May 2020 <https://www.thebetterindia.com/119316/tipu-sultan-mysore-rockets-hyder-ali-first-war-rocket/>

the postcolonial era, there was a spurt in technological nationalism, in this case Indian technological nationalism, which talked of technological advances such as the development of rocketry as mentioned above in the supposedly ancient or primitive civilizations thereby subverting the colonialist discourse of the ancient civilizations being primitive and far away from technological progress or rational thinking.

Postcolonialism is not only an era in the history of time but it is also a literary or a critical theory that aims to disrupt the established power structures and authority which have perpetrated oppression and exploitation resulting in destruction and annihilation. The discourse aims to restore the rights of the dispossessed or the voiceless through consciousness raising and offering of solutions to the innumerable pressing issues in various fields. It has dealt with historical issues and has brought about the historical rehabilitation by turning the focus on alternate histories which emerge from the margins or the peripheries. The pressing social issues based on the discrimination against certain races, the inequality among various classes and caste groups have been brought into focus and have been resolved during the era of postcolonialism. The postcolonial discourse during the era of postcolonialism has always focused on cultural clashes and their resolution by incorporating the culture of the “other” into the fold of the predominant culture thereby bringing about multiculturalism or peaceful co-existence of cultures. The era has seen freedom being granted to many of the colonies which were under the political yoke of the colonizing powers. The period has also witnessed the launching of various freedom struggles which have caused the liberation of many territories and creation of innumerable number of nation states. The era has witnessed the rehabilitation and restoration of indigenous economic enterprises to balance the burgeoning growth of the foreign economic enterprises in the colonies which were instrumental in the destruction of the indigenous economic establishments. The period saw the end of imperialism in the ex-colonies and the beginning of economic development. The postcolonial era witnessed developments in the field of Science which is of special interest to the readers. The domain of Science saw the development of a field called Phrenology which propounded the measurement of the contour of the skull of a human being to predict the personality traits.^{4 5 6} Phrenology was developed by the German physician Franz Joseph Gall in 1796.⁷ The discipline was influential from about 1810 to 1820. Phrenology also formed the scientific basis for racism during the age of colonialism as the superiority of the white races was established in comparison to the “other” races by measuring the contours of their skulls and a hierarchy of races was established on the basis of their evolutionary characteristics with the white races or the Caucasians at the top of the hierarchy and the “other” races namely the Australian aboriginals and the Maoris at the bottom of the hierarchy.⁸ Later, although Phrenology advocated brain to be an organ of the

⁴ Wihe, J.V. “Science and Pseudoscience: A Primer in Critical Thinking.” *Encyclopedia of Pseudoscience*. California: Skeptics Society, 2002. 195-203.

⁵ Hines, T. *Pseudoscience and the Paranormal*. New York: Prometheus Books, 2002. 200

⁶ Fodor, Jerry A. *Modularity of Mind: An Essay on Faculty Psychology*. Massachusetts: MIT Press, 1983. 14-131.

⁷ Graham, Patrick. *Phrenology*. Richmond Hill, Ont.: American Home Treasures, 2001.

⁸ Staum, Martin S. *Labelling People: French Scholars on Race, Society and Empire, 1815-1848*. Montreal: McGill Queen’s University Press, 2003.

mind with areas having specific functions which has its basis in Science but it departed into the realm of pseudoscience when it extended its findings through extrapolation beyond empirical knowledge.⁹ The discourse related to Phrenology which had provided a scientific basis for the colonialist enterprise declined as it was proved to be pseudoscientific¹⁰ in nature which may be called a postcolonial act as that disrupted the myth of racial superiority on the basis of which the colonialists engaged in civilizing the world.

The era of postcolonialism also saw a development in the field of Meteorological Sciences as projected in Elizabeth Feizkhah's "And Here's the Wattle Forecast" which talks of a landmark development in the field of Meteorological Sciences or Meteorology that is otherwise known to project scientific weather forecasting based on reason and logic but the inclusion of indigenous ways of the Australian aborigines in terms of weather forecasting although based on intuition is precise and accurate. Thus, this development resulted in the launching of the Indigenous Weather Project which formally acknowledged the significance of indigenous weather lore.¹¹

Postcolonialism as a Literary Theory or a Critical Theory

Postcolonialism is a discourse which in the present times is thought to be a dying theory as it has been in currency since 1980s and 1990s and has already met many of its goals such as the restoration of many of the rights of the dispossessed, the voiceless and the powerless, inversion of the power pyramid dominated by the oppressor, ushering in political independence coupled with economic independence, political self-determination, propagating the concept of a nation and that of a nationality, foregrounding the identities of the subalterns, the assertion of cultural integrity, focusing on the plight of the diaspora, explaining hybridity, countering the stereotypes, the inaccuracies and the generalizations circulated by the oppressor in the educational, the legal, the political, and the social texts and settings, domestication of the oppressor's language, language chauvinism related to indigenous languages, appropriation of colonial art forms, dealing with neo-colonialism in language, trade, commerce etcetera.¹² Thus, many have predicted its end which is very much in sight. But postcolonialism is a literary theory or a critical theory or a discourse that would never lose its currency because its essence lies in combating or resisting oppression and exploitation. Moreover, oppression and exploitation will never end in this world, it simply changes its form but nevertheless, it will always be there in its everchanging new avatars. Since there is no end to oppression then there will be no end to postcolonialism as well. The metaphor chosen for postcolonialism is a Uchchaihshravas because postcolonialism as a discourse has the ability to diversify and expand its margins to include new areas. Thus, Uchchaihshravas, a mythical creature which is a horse

⁹ Bunge, M. *From a Scientific Point of View: Reasoning and Evidence Beat Improvisation Across Fields*. Cambridge: Cambridge Scholar Publishing, 2018. 74.

¹⁰ Zalta, Edward N., ed. "Science and Pseudo-Science." *Stanford Encyclopedia of Philosophy*. 3 September 2008. 1 June 2020 <https://plato.stanford.edu/entries/pseudo-science/#Aca>

¹¹ Mukherjee, Panchali. "The Empire Writes Back through Weather Forecasting: A Study of 'And Here's the Wattle Forecast' in Postcolonialism." *GNOSIS: An International Refereed Journal of English Language and Literature*. Vol. 4 - No. 3 (April 2018): 9-16.

¹² Panikkar, Chitra, ed. *Literary Vistas Vol IV*. Bangalore: Prasaranga Press, 2014. 219-236.

with wings to fly becomes a symbol of postcolonialism. Its wings actually project its superpower to fly and, in this context, it can be symbolic of postcolonialism's ability to adapt to any situation.

The fact that postcolonialism is seen as the Uchchaihshravas of the times because of the expansion of its boundaries to include the field of Science. Science is a discipline that is based on rationality, logic and objectivity but it is a wonder that despite these attributes forming its foundation, postcolonialism has encompassed it and has derailed the founding pillars of the discipline as a result of discrimination being practiced even in this field. The three terms that are significant in this context are speciesism, robotism and environmental degradation. Discrimination leading to oppression and exploitation in the field of Science is based on speciesism, robotism and environmental degradation in addition to the traditional bases of race, class, caste and gender on which oppression and exploitation were traditionally based as per the discourse of postcolonialism. The oppression based on speciesism and environmental degradation led to the rise of "Postcolonial Ecocriticism" which is known to subvert the anthropocentric nature of Postcolonialism as "Postcolonial Ecocriticism" is known to resist speciesism and environmental degradation through the advocacy of animal rights and environmentalism.¹³ The conflation of Postcolonialism and Ecocriticism can be contested on the ground that if postcolonialism is a discourse that espouses or advocates the rights of the marginalized then doing away with the marginalization of those who are at the periphery whether the marginalized or the victimized are humans or other kinds of flora and fauna and working towards preserving them may well be included under it whereas in the case of ecocriticism, it deals with environmental concerns in literature. Postcolonialism covers a much wider area. Moreover, postcolonialism's concern is not just in terms of examining literary texts for issues but it also examines real life situations for burning issues such as Apartheid in South Africa, Dalit activism in India, Afro-American movement in U.S.A. etcetera. On the other hand, Ecocriticism is restricted to examining the relation between literature and environment. It can be stated that both Animal Studies and Environmentalism in addition to Robotism have infused a new lease of life into Postcolonialism and the discourse has adapted itself to the current demands of the contemporary times as there is an outcry related to discrimination in the sphere of Science. The nomenclature may thus be restricted to "Postcolonialism" rather than introducing "Postcolonial Ecocriticism" as a new area. If at all "Postcolonial Ecocriticism" is to be used it has to be in terms of examining the concerns related to the flora and the fauna as mentioned in the literary texts.

"Postcolonialism" as an idea undertakes the real life issues such as the cultivation of palm for palm oil in Malaysia, Indonesia etcetera which has destroyed the natural habitats of the orangutans by decimating the rainforests¹⁴, the erection of cellphone towers in the cities in India which have caused 75% to 80% decline in the population of the house sparrows in the

¹³ "The Making of Postcolonial Ecocriticism." *Shodhganga*. 1 May 2020
<https://shodhganga.inflibnet.ac.in/bitstream/10603/219039/3/chapter%201.pdf>

¹⁴ Buchholz, Rachel, ed. "Save the Animals." *National Geographic Kids* July 2020: 27.

urban areas¹⁵, the lifting of ban on hunting bears, bear cubs, wolf pups and shooting of caribou in Alaska, U.S.A¹⁶, the cutting of trees in Aarey Colony, Mumbai, India to create a metro car shed near the Mithi river bank¹⁷, the use of robots in daily life which may involve unforeseen risks such as human beings losing their sources of livelihood that may have an adverse impact on the field of Robotics if the futuristic scenario is to be taken into consideration¹⁸ etcetera. The flip side of these debates also has to be taken into consideration as the economies of the countries like Malaysia and Indonesia get affected if the cultivation of palm and the production of palm oil is stopped, it is not feasible to do away with the cellphone towers in the cities as that would pose an impediment in the network coverage of the mobile phones which would be a setback for the wireless technologies, the hunting of animals in the Alaskan region is primarily done by remote communities of the Alaskan region and banning the hunting of the animals may hurt the abilities of the residents of Alaska to feed their families. The metro car shed is a necessity to develop the Mumbai metro-3 project for better transportation and communication links. The use of robots in daily life may become indispensable with the development of artificial intelligence but should not prove to be inimical to its own growth.

The discourses which refute or subvert speciesism can be considered to exist under the umbrella of postcolonialism because they make a case for the rights of those living beings which are voiceless and have been exploited to serve the utilitarian purpose of one dominant species, that is, homo sapiens. Richard Hood Jack Dudley Ryder (b. 1940-) an English writer, psychologist and an animal rights activist coined the term “Speciesism” in a privately printed pamphlet in 1970.¹⁹ Speciesism is basically discrimination based on the membership of a species which is morally considered to be more important than the members of other species.²⁰ The fact that speciesism entails that the moral community should include human beings and not non-humans itself is a kind of discrimination.²¹ In the context of speciesism, the human beings are considered to be superior to the members of other species on the basis of parameters created by human beings to map the intelligence of the members of the other species. The superiority of the human beings over other animals has been instrumental in terms of granting human rights.²² The fact that certain animals are considered to be superior to others in terms of

¹⁵ Ganguly, Manas. “World Sparrow Day: The Fall of the Sparrow.” *PC Quest* 20 March 2018. 8 July 2020 <https://www.pcquest.com/world-sparrow-day-fall-sparrow/>

¹⁶ “Blinding Prey, Shooting Pups: Controversial Hunting Methods Return to US.” *NDTV* 8 July 2020. 8 July 2020 <https://www.ndtv.com/world-news/blinding-prey-shooting-pups-controversial-hunting-methods-return-to-us-2258910>

¹⁷ “Don’t cut anymore trees, says SC on Mumbai’s Aarey.” *Economic Times* 7 October 2017. 8 July 2020 <https://m.economictimes.com/politics-and-nation/supreme-court-grants-stay-in-felling-of-trees-in-mumbais-aarey-colony/articleshow/71473965.cms>

¹⁸ *Anukul*. By Satyajit Ray. Dir. Sujoy Ghosh. Perf. Saurabh Shukla, Parambrata Chattopadhyay and Kharaj Mukherjee. 4 October 2017 <https://www.youtube.com/watch?v=J2mqIgdde5I>

¹⁹ Ryder, Richard D. *Animal Revolution: Changing Attitudes towards Speciesism*. Oxford: Berg Publishers, 2000.

²⁰ “The Case Against Speciesism.” *Sentience Politics*. 22 June 2016. 5 May 2020 <https://sentience-politics.org/philosophy/the-case-against-speciesism/>

²¹ Yancy, George and Peter Singer. “Peter Singer: On Racism, Animal Rights and Human Rights.” *The New York Times*. 27 May 2015. 10 June 2020 <https://opinionator.blogs.nytimes.com/2015/05/27/peter-singer-on-speciesism-and-racism/>

²² Cavalieri, Paulo. *The Animal Question: Why Nonhuman Animals Deserve Human Rights*. Oxford: Oxford University Press, 2004. 70.

their similarity, familiarity or usefulness to human beings is an issue under the aegis of animal rights.²³ Peter Albert David Singer (b. 1946-), an Australian moral philosopher and Ira W. DeCamp, Professor of Bioethics at Princeton University and also at the Centre for Applied Philosophy and Public Ethics, University of Melbourne talks about speciesism playing a role in factory farming which is a form of intensive agriculture that specifically adopts an approach to animal husbandry that is designed to maximize production while minimizing costs, in addition to it there are other forms of speciesism like using members of other species for entertainment such as cock fights, bull fights, rodeo, dog shows, cat shows etcetera, obtaining and using animal products such as furs, skins, elephant tusks, horns, claws etcetera through poaching which sometimes even leads to the killing of animals, animal testing also known as animal experimentation or animal research or in vivo testing being conducted on animals, animal sacrifices as a part of rituals or festivals and harming or refusing to provide aid to the animals in the wild belonging to certain species when afflicted by natural calamities in the name of preserving certain other species, populations, biodiversity or ecosystems.²⁴ Thus, speciesism has innumerable forms but one basis which is that of discrimination.

The speciesism has been countered by discourses such as Richard Hood Jack Dudley Ryder's (b. 1940-) animal activism in the form of raising a protest against animal experimentation in the pamphlet titled "Speciesism".²⁵ He denied any essential biological difference between the animals of other species and the human beings. Richard D. Ryder's *Animals, Men and Morals: An Inquiry into the Maltreatment of Non-Humans* (1971) is a collection of essays which advocates animal rights. Peter Albert David Singer (b. 1946-) considered speciesism to be at par with racism and sexism as all these phenomena violate the principle of equality. He states from a preference-utilitarian perspective that speciesism violates the principle of equal consideration of interests resulting in treating of similar cases in dissimilar ways.²⁶ Richard Rorty (1931-2007) stated that the human beings out of Eurocentric human rights culture failed to understand that the membership of any species is the required criterion for inclusion in the moral community.²⁷ R.G. Frey (1941-2012) an animal rights critic states that if given a choice he would allow experiments on marginal case humans who are senile, comatose etcetera over the experiments on animals.²⁸ Steven M. Wise (b. 1952-), an American legal scholar who specializes in animal protection issues, primatology and animal intelligence, teaches at Harvard Law School, Vermont Law School, John Marshall Law School, Lewis & Clark Law School

²³ Waldau, Paul. *The Specter of Speciesism: Buddhist and Christian Views of Animals*. Oxford: Oxford University Press, 2004. 5, 23-29.

²⁴ "Why we should give moral consideration to sentient beings rather than ecosystems." *Animal Ethics*. 26 March 2016. 14 May 2020
<https://www.animal-ethics.org/why-we-should-consider-sentient-beings-rather-than-ecosystems/>

²⁵ Ryder, Richard D. *Animal Revolution: Changing Attitudes towards Speciesism*. Oxford: Berg Publishers, 2000.

²⁶ Ryder, Richard D. "Experiments on Animals." *Animals, Men and Morals: An Inquiry into the Maltreatment of Non-Humans*. United Kingdom: Taplinger Pub Co., 1971.

²⁷ Rorty, Richard. "Human Rights, Rationality and Sentimentality." *Truth and Progress: Philosophical Papers III*. Cambridge: Cambridge University Press, 1998.

²⁸ Frey, R. G. *Rights, Killing and Suffering*. Oxford: Blackwell's, 1983.115-116.

and Tufts University School of Veterinary. He is of the opinion that speciesism is a bias.²⁹ Richard Dawkins (b. 1941-) an English ethologist, evolutionary biologist and author who is an emeritus of New College, Oxford and was the Professor for Public Understanding of Science at the University of Oxford from 1995 to 2008. He made a case against speciesism in *The Blind Watchmaker* (1986), *The Great Ape Project* (1993) and *The God Delusion* (2006) by elucidating the connection that human beings have with animals of other species as per evolutionary theory. He states that speciesism is an example of a discontinuous mind. The vivisection of a large number of intelligent adult chimpanzees will never create the same outrage as the abortion of a single human zygote although many human zygotes do get aborted spontaneously or naturally.³⁰ ³¹ He is of the opinion that it is possible because the intermediates between humans and chimpanzees are all dead. Isaac Bashevis Singer, the Polish-American writer in Yiddish who was awarded the Nobel Prize for Literature in 1978 compares between the treatment of animals and the Holocaust as at the end of World War II the European Jewish victims were led to their deaths as sheep are led to slaughter and they did not offer any resistance.³² David Sztybel (b. 1967-) is a Canadian philosopher specializing in animal ethics who states in his research paper “Can the Treatment of Animals Be Compared to the Holocaust?” (2007) that the racism of the Nazis is comparable to speciesism in terms of eating meat or using animal by-products produced on factory farms.³³ Y. Michael Barilian, an Israeli physician disagrees with the comparison between speciesism and Nazi racism as the former is the recognition of rights on the basis of group membership rather than any moral considerations whereas the latter is about extolling the abuser and condemning the abused.³⁴ Sentio-centrism propounds that conscious beings are the center of moral concerns because they have intrinsic value and moral standing whereas the rest of the world has instrumental value. Libertarian extension is a philosophy which subverts sentio-centrism and advocates the extension of intrinsic value of nature beyond sentient beings. Thus, the principle of individual rights should be extended not only to animals but also to living beings without a nervous system such as trees, plants and rocks. The subversion of sentio-centrism forms the basis of environmentalism

²⁹ Wise, Steven M. “Animal Rights, One Step at a Time.” *Animal Rights: Current Debates and New Directions*. Oxford: Oxford University Press, 2004.

³⁰ Dawkins, Richard. “Richard Dawkins: The tyranny of the discontinuous mind.” *New Statesman*. 19 December 2011. 1 June 2020

<https://www.newstatesman.com/blogs/the-staggers/2011/12/issue-essay-line-dawkins>

³¹ Dawkins, Richard. *The Blind Watchmaker*. New York: W. W. Norton Company, 1996. 262-263.

³² Singer, Isaac Bashevis. *History of Vegetarianism*. International Vegetarian Union. 22 December 2008. 14 June 2020

<https://web.archive.org/web/20081222210007/http://www.ivu.org/history/northam20b/singer.html>

³³ Sztybel, David. “Can the Treatment of Animals be Compared to the Holocaust?” *Ethics & the Environment*, Vol. 11 No. 1, 2006, p. 97-132. *Project Muse* muse.jhu.edu/article/196512.

³⁴ Barilian, Y. Michael. “Speciesism as a precondition to justice.” *Politics and the Life Sciences*. 23 (1): 22-33,

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March 2004 [https://doi.org/10.2990/1471-5457\(2004\)23\[22:SAAPTJ\]2.0.CO;2](https://doi.org/10.2990/1471-5457(2004)23[22:SAAPTJ]2.0.CO;2)

whereas the philosophy of Libertarian extension forms the basis of taking the drive to protect the environment further.^{35 36 37}

Carl Cohen (b. 1931-) is an American philosopher. He is a professor of Philosophy at the University of Michigan Residential College in Ann Arbor, Michigan, U.S.A. He recognizes significant differences between animals and human beings and is of the opinion that the animals do not qualify for Kantian personhood of morally considerable beings which would add value to them.³⁸ Nel Noddings (b. 1929-) an American feminist, has criticized Singer's concept of speciesism for not considering the context of species preference as a kind of discrimination against different forms of life.³⁹ Peter Staudenmaier trivializes the differences between speciesism and racism or sexism.⁴⁰ Sir Bernard Arthur Owen Williams (1929-2003) states that racists and sexists deny any input from those of a different race or sex in terms of the treatment to be meted out to them whereas in the case of speciesism it is possible only for the humans to discuss the terms of treatment of the animals. Bernard Williams states that the properties under personhood are morally relevant to issues for destroying a certain kind of animal while the property of being a human being is not. He questions whether these properties are simply better or they are made to seem better because of human attachment to them.⁴¹ Christopher Grau supported Bernard Williams and stated that if rationality, sentience and moral agency are the criteria that bestow a moral status as an alternative to species based moral status then the use of these properties instead of others have to be justified and the existence of an impartial observer is required.⁴² Ayn Rand's objectivism professes that the humans are the only beings who possess a conceptual consciousness, the ability to reason and develop a moral system so the homo sapiens are the only species entitled to rights.⁴³ Leonard Sylvan Peikoff (b. 1933-), the objectivist philosopher, states that life in the animal kingdom survives by feeding on life but if man prioritizes the rights of other species it amounts to depriving man himself of the right to life.⁴⁴ Douglas Maclean questioned whether morality can be bestowed on different

³⁵ Vardy, P. and Grosch, P. *The Puzzle of Ethics*. New York: Harper Collins, 1999.

³⁶ Holden, Andrew. "In Need of New Environmental Ethics for Tourism?" *Annals of Tourism Research*. Vol. 30 No. 1 (2003): 94-108. [doi:10.1016/s0160-7383\(02\)00030-0](https://doi.org/10.1016/s0160-7383(02)00030-0)

³⁷ "The Moral Status of Animals." *Stanford Encyclopaedia of Philosophy*. 1 July 2003. 1 July 2020 <https://plato.stanford.edu/entries/moral-animal/#Sent>

³⁸ Cohen, Carl. "The Case for the Use of Animals in Biomedical Research." *The New England Journal of Medicine*. Vol. 315 No. 14 (October 1986): 865-870. DOI:[10.1056/NEJM198610023151405](https://doi.org/10.1056/NEJM198610023151405). PMID [3748104](https://pubmed.ncbi.nlm.nih.gov/3748104/)

³⁹ Noddings, Nel. "Comment on Donovan's 'Animal Rights and Feminist Theory'." *Signs*. Vol. 16 No. 2 (1991): 418-422.

⁴⁰ Staudenmaier, Peter. "Ambiguities of Animal Rights." *Communalism: International Journal for a Rational Society* Issue 5 (March 2003). 10 June 2020 <http://www.communalism.org/Archive/5/aar.print.html>

⁴¹ Williams, Sir Bernard Arthur Owen. "The Human Prejudice." *Peter Singer Under Fire: The Moral Iconoclast*

Faces His Critics. Vol. 3 (2009): 135-152.

⁴² Grau, Christopher. "A Sensible Speciesism?" *Philosophical Inquiries* Vol. 4 No. 1 (2016): 49-70.

⁴³ "Ayn Rand." *Stanford Encyclopaedia of Philosophy*. 8 June 2010. 5 May 2020 <https://plato.stanford.edu/entries/ayn-rand/>

⁴⁴ Peikoff, Leonard. *Objectivism: The Philosophy of Ayn Rand*. New York: Dutton, 1991. 358.

species and the animals were held exempt from morality.⁴⁵ The British philosopher Roger Scruton regards the emergence of the animal rights and anti-speciesism movement as the strangest cultural shift within the liberal worldview as the rights and the responsibilities are exclusively in the domain of the human condition and it is not sensible to spread it beyond the species of homo sapiens. He accuses the anti-speciesism advocates of pre-scientific anthropomorphism, attributing human traits to the animals.⁴⁶ Thomas Wells critiques Peter Singer on the fact that Peter Singer's call to end animal suffering justifies exterminating every animal on the planet in order to end the innumerable ways in which they suffer and to eliminate the pain associated with suffering. Thomas Wells states that Peter Singer's argument presupposes a hierarchy as per which the focus is on the suffering that the humans inflict on the animals and the ignoring of the suffering inflicted upon the animals by themselves or that inflicted upon them by nature thereby making some kind of sufferings more important than the others although the claim is to be committed to the equality in terms of suffering. Thomas Wells indicates towards another aperture in Peter Singer's claims in relation to equality of suffering. Peter Singer denies the moral status to the plants as they cannot subjectively feel the stimuli or react to them.⁴⁷ Robert Nozick notes that if species membership is irrelevant then the endangered animals have no special claim.⁴⁸

The debate related to speciesism has many arguments which may be for or against the motion but the main crux of the debate lies in the fact that all forms of life have the same vitality in them so all living beings occupy a designated position in the scheme of life which means that if special significance is being provided to anyone species then the significance of the other species is being undermined. The championing of the rights of the other species may also be considered to be a postcolonial act. The predominance of the homo sapiens has driven some of the species to the brink of extinction. Moreover, the other species do not exist for the purpose of being used by the homo sapiens. On the contrary, when it comes to vivisection on animals an alternative method would be to do computer simulation for understanding biochemical molecular interactions in the initial stages of drug or vaccine development. The drug testing on animals can be used in the final stage which would reduce the number of vivisections done on the animals. The use of such kind of alternative methods may be explored further to decrease cruelty on animals. Human beings should abstain from pleasure sports that result in cruelty towards animals such as bull fights, rodeo, cock fights etcetera. Humans should refrain from animal sacrifices during rituals or festivals. The killing of animals for meat should involve less cruelty towards animals or the other alternative could be abstained from killing of animals for meat.

⁴⁵ MacLean, Douglas. "Is 'Human Being' a Moral Concept?" *Philosophy and Public Quarterly* Vol. 30 No. ¾ (2010): 16-20. DOI: <http://dx.doi.org/10.13021/G8pppq.302010.90>

⁴⁶ Scruton, Roger. "Animal Rights." *City Journal*.

⁴⁷ Wells, Thomas. "The Incoherence of Peter Singer's Utilitarian Argument for Vegetarianism." *ABC Religion and Ethics*. 24 October 2016. 1 June 2020
<https://www.abc.net.au/religion/the-incoherence-of-peter-singers-utilitarian-argument-for-vegeta/10096418>

⁴⁸ Nozick, Robert. *Socratic Puzzles*. Massachusetts: Harvard University Press, 1997. 309.

The myth of “Dasavatara” in Hindu mythology foregrounds Vishnu, the God of preservation, from the trinity of Brahma, the God of creation, Vishnu, the God of preservation and Mahesh, the God of destruction. Vishnu’s reincarnation in the form of ten avatars or forms is considered to be a parable of evolution in which the vitality or essence of life that is represented by Lord Vishnu is there in various avatars such as matsya or fish, kurma or tortoise, varaha or boar, Narasimha or man-lion, a semi-human avatar, vamana or the growing dwarf who takes the first step towards the human form, Lord Rama, Lord Krishna, Lord Buddha and Kalki, the avatar that is yet to come in. Thus, the vitality or life represented by Lord Vishnu is there in all forms of life and it is the same life. Moreover, a kind of step by step evolution is seen in the Dasavatara mythology and a gradual progress from simpler forms of life to more complex forms of life which is also taken to be a kind of spiritual progress. The Theosophist Helena Blavatsky (1831-1891) in the 1877 opus *Isis Unveiled* stated that “Dasavatara” is the allegorical representation of Charles Darwin’s theory related to evolution. Sri Aurobindo too considered the “Avataric Evolution” as a parable of evolution. Such kind of analogy shows Hinduism to be at par with modern science.^{49 50}

In Christianity, the early theologians looked at “nature red in tooth and claw”, that is, it was a natural law of the universe that animals should be preyed on and eaten by others. This was reflected in their theology. Christian thinking downgraded animals for three main reasons: (i) God had created animals for the use of human beings (ii) Animals were distinctively inferior to human beings and were worth little if any moral consideration and (iii) The Christian thought was heavily human-centric. Some of the animals demonstrated that virtuous Christians treated animals respectfully and kindly such as St. Antony of Padua preached to fish, St. Francis of Assisi preached to the birds, cows are protected by St. Brigit, St. Columba told his monks to care for a crane and St. Brendan was helped in his voyage by sea monsters. The modern Christian thought accepts that the gap between animals and human beings is bridgeable. The Christian thought sees that human dominion over nature should be a kind of stewardship and partnership rather than domination and exploitation which has softened Christian attitudes towards animals.⁵¹

Islam provides for animal welfare. There is a rich tradition of Prophet Mohammad’s concern for animals to be found in the Hadith and Sunna. Islam provides an ethic of environmental concern and non-human animal protection. The Quran is explicit with using animals for human purposes but when followed closely it reveals teachings of kindness and concern for animals. Islamic law insists on humane treatment of animals. The killing of non-human animals for meat and hides by halāl methods is permissible and is based on a set of ethical and religious standards with meat being forbidden or makrooh if the non-human animal has been subjected to

⁴⁹ Ashok V. *Dasavatara: The Ten Incarnations of Vishnu*. New Delhi: Rupa Publications India Pvt. Ltd, 2002.

⁵⁰ Nanda, Meera. “Madame Blavatsky’s children: Modern Hindu Encounters with Darwinism.” *Handbook of the*

Religion and the Authority of Science. Ed. James R. Lewis and Olav Hammer. Massachusetts: Brill, 2010.

⁵¹ “Animal Rights.” 3 August 2009. 10 May 2020

https://www.bbc.co.uk/religion/religions/christianity/christianethics/animals_1.shtml

inhumane treatment. The killing of wildlife other than for food is prohibited as is the caging of birds, sports hunting and animal baiting. The edicts from the second and the fourth Caliphs too ensures that humane and efficient practices are fulfilled.⁵²

Jainism has focused on the non-human animals to the utmost thereby advocating ahimsa or non-violence and life in general is bound together by mutual support and interdependence. It prohibits killing or injuring of any living being as that disrupts the order of the entire world. The Jains take painstaking efforts to preserve the life and well-being of all creatures. The religious discourses of various religions therefore counter speciesism to a great extent. Moreover, the instances of countering speciesism are postcolonial acts as harming any form of life in any way is a crime but sometimes it is inevitable either for food or for self-defense or for experimentation but alternative methods may be explored to preserve life as that is crucial for the well-being of the planet and to maintain the ecological balance in the nature. Thus, postcolonialism as a discourse should not be restricted to the domain of restoring the rights of the dispossessed human beings. It should also include restoring the rights of other forms of life and exploring other scientific methods to stem the indiscriminate exploitation of other forms of life and curbing it wherever possible.⁵³

The fact that all the religions mentioned here have originated in Asia and the fact that the religions display the same rationality as seen in the foundation of modern Science directly subverts the idea of “Orientalism”.⁵⁴ In 1978, the Palestinian-American critic Edward Wadie Said’s (1935-2003) book *Orientalism* exposed the inherent bias in the study of the non-Western cultures by the West particularly in the nineteenth century which is considered to be the heyday of colonialist and imperialist expansion. The body of works created under the aegis of Orientalism involved gross misrepresentation of the East or the orient so that colonialism and imperialism can be justified using a philanthropic mask. Moreover, the taking off this mask has been the basis of the postcolonial thought and discourse. The abovementioned evidence shows the scientific temperament of the religious discourses that originated in Asia and was disseminated across the globe thereby disproving the bias related to the orient being uncivilized or unscientific. The ancient religious injunctions provide evidence of a scientific temper and logical thinking which is a postcolonial act as it disproves the ingrained colonial biases.

Robots may be defined in ordinary terms as machines that resemble humans and do mechanical and routine tasks on command.⁵⁵ Moreover, Robotics is an interdisciplinary field of research at the interface of computer science and engineering. It involves design, construction and the use of robots.⁵⁶ The human-robot interaction practitioners are robotics researchers, designers,

⁵² Rahman, Sira Abdul. “Religion and Animal Welfare: An Islamic Perspective.” *Multidisciplinary Digital Publishing Institute*. Ed. Clive J. C. Philips. 17 February 2017. 10 July 2020
file:///Users/panchalimukherjee/Downloads/Religion_and_Animal_Welfare-An_Islamic_Perspective.pdf

⁵³ “Animal Rights.” 5 July 2020
<http://thinkdifferentlyaboutsheep.weebly.com/animal-rights-a-history-jainism.html>

⁵⁴ Said, Edward Wadie. *Orientalism*. New York City: Pantheon Books, 1978.

⁵⁵ Nocks, Lisa. *The Robot: The Life Story of a Technology*. Westport, CT: Greenwood Publishing Group, 2007.

⁵⁶ Arreguin, Juan. *Automation and Robotics*. Vienna, Austria: I-Tech and Publishing, 2008.

engineers, product managers and marketers working in the industry, academia or government.⁵⁷ The transition of robots into human social environments (HSEs) involves robots interacting proximately with people in increasingly intrusive ways. The transition presents a new set of technical, ethical and legal challenges never before seen in the field. The code of ethics that has been devised for the human robot interaction is more inclined towards the welfare of human beings. Isaac Asimov's three laws of Robotics are: the first law is that a robot shall not harm a human or by inaction allow a human to come to harm. The second law is that a robot shall obey any instruction given to it by a human and the third law is that a robot shall avoid actions or situations that could cause it to come to harm itself. The three laws of Robotics are inclined towards the human beings rather than the robots ("Three Laws of Robotics"). Moreover, the specific principles designed for the operation of the robots include human dignity considerations such as the emotional needs of the humans are to be respected, the human's right to privacy should be respected to the greatest extent consistent with reasonable design objectives and both physical and psychological human frailty should be respected. The design considerations are: there should be maximal and reasonable transparency in the program of robotic systems, predictability in robotic behavior is desirable, trustworthy system design principles are required across all aspects of a robot's operation. The legal considerations are: all relevant laws and regulations concerning individuals' rights and protection are to be respected, a robot's decision paths must be re-constructible, human informed consent to human-robot interaction (HRI) is to be facilitated to the greatest extent possible consistent with reasonable design objectives, humanoid morphology and functionality should be permitted only to the extent necessary for the achievement of reasonable design objectives. The social considerations are: Wizard-of-Oz involves a technique where a practitioner remotely operates a robot and controls many of its attributes such as speech, non-verbal behavior, navigation etcetera. WoZ has multiple degrees of control as well as mixed initiative interaction. WoZ has an inherent social deception which is referred to as "Turing Deception". The deception is such that a participant cannot determine whether they are interacting with a machine, a specific person or a person masquerading as a different person. Wizard-of-Oz should be employed as judiciously and carefully to avoid Turing deceptions and avoid racist, sexist and ableist morphologies and behaviors in robot designs. The robots are said to have an instrumental value rather than an intrinsic value. Thus, they have to be given a value that is at par with the human beings. The belief is that the robots exist as they have to be used by the human beings but the thought is that the code of ethics which is operational in terms of handling robots should take into consideration the instrumental value of the robots and respect their existence as well as the utilitarian aspect associated with them.⁵⁸

⁵⁷Riek, Laurel D. and Don Howard. "The Code of Ethics for the Human-Robot Interaction Profession." *We Robot*. 2014.10 June 2020
<http://robots.law.miami.edu/2014/wp-content/uploads/2014/03/a-code-of-ethics_for-the-human-robot-interaction-profession-riek-howard.pdf>

⁵⁸ Riek, L.D. "Wizard-of-Oz Studies in HRI: A Systematic Review and New Reporting Guidelines." *Journal of Human Robot Interaction* 1.1 (2012).

In Hinduism, there are two festivals that are celebrated namely Ayudha Puja and Vishwakarma Puja. Ayudha Puja is a part of the Navaratri festival and is known as the “Worship of Instruments” or the “Astra Puja”. It is celebrated in Tamil Nadu, Telengana, Andhra Pradesh, Kerala, Odisha, Maharashtra and Karnataka. The special mention of this festival is being made here because during this festival various types of equipment, weapons and tools are worshipped. In the cross-cultural development that has revolutionized the society, modern Science has made a lasting impact on the scientific knowledge and industrial base in India but the essence of old religious order is maintained by worship of typewriters and computers. In Orissa, the tools used for cultivation like plough, for war like swords, daggers etcetera and inscription writing like a metal stylus etcetera are worshipped.⁵⁹ The other festival that is noteworthy and should be mentioned here is Vishwakarma Puja which is celebrated in the honor of a divine Hindu god, Vishwakarma, who is considered to be the creator of the world. In Hindu mythology, he is believed to have constructed the holy city of Dwarka, the kingdom of Lord Krishna, and the “Maya Sabha” of the Pandavas from the Kuru clan. It is celebrated on “Kanya Sankranti” which would be 16th or 19th September of the Gregorian calendar and is the last day of the Bhadra month of the Hindu calendar or a day after Diwali along with Govardhan Puja. It is observed in the states such as Assam, Uttar Pradesh, Karnataka, West Bengal, Bihar, Jharkhand, Odisha, Tripura and in neighboring Nepal. The festival is primarily observed in the factories, industrial areas and the shops by the engineers, architectural community, artisans, craftsmen, mechanics, smiths, welders, industrial workers, factory workers etcetera. They pray for a better future, safe working conditions, success in respective fields and the smooth functioning of various machines.⁶⁰ In relation to these festivals, more than their ritualistic aspects is the significance of the essence of these festivals. The idea behind these festivals or the rituals is to honor the entities although they are inanimate for their instrumental value as they serve a purpose or are extremely useful in various ways. This aspect itself critiques the power gradient created through the laws of Robotics as they give a preference to the human needs and the robots are seen as mere machines rather than entities with instrumental value. The therapeutic robots help to treat children with autism spectrum disorders, to reduce stress and encourage pro-social behavior among other adults and to help children with developmental disabilities. Similarly, the physically assistive robots help in particularly intimate activities such as bathing and sanitation. The direct physical contact between robots and humans as seen in situations such as lifting patients out of beds and wheelchairs sometimes do lead to human patients forming emotional bonds with robots in environments lacking human companionship. Even in the case of the spread of communicable diseases robots may be used for the care of the patients. Thus, the code of ethics in relation to Robotics should not be tilted just towards humans but should provide for the well-being of the robots as well.⁶¹

⁵⁹ “Ayudha Puja.” *Bharata Sanskriti*. Way Back Machine Internet Archive. 10 June 2020
<http://archives.amritapuri.org/bharat/festival/navaratri.php>

⁶⁰ Melton, J. Gordon, ed. *Religious Celebrations: An Encyclopedia of Holidays, Festivals, Solemn Observances, and Spiritual Commemorations Volume 1*. Santa Barbara: ABC-CLIO, 2011. 908-909.

⁶¹ Riek, L.D. “Wizard-of-Oz Studies in HRI: A Systematic Review and New Reporting Guidelines.” *Journal of Human Robot Interaction* 1.1 (2012).

Homi K. Bhabha (b. 1949-) in the context of “Postcolonialism” introduced the notion related to hybridity which involves the fusion of cultural forms to form a hybrid or mixed perspective which is a result of the cultural interaction of the colonizer and the colonized. If the notion of hybridity is transported to Robotics the result would be the bionics or the cyborgs. Bionics refer to the designing of engineered robots on the basis of biological systems or methods found in nature whereas cyborgs are persons whose human abilities are extended beyond normal human limitations by mechanical elements built into the body. A human cyborg combines organic and mechanical body parts to improve a certain bodily dysfunction or enhance capabilities such as augmenting one’s body with cochlear implants, cardiac pacemakers or even contact lenses. Both the examples involve hybridity, as in the case of bionics, the model is a biological system which is applied on a mechanical or electronic system thereby exhibiting hybridity whereas in the case of a human cyborg it is a fusion of organic and mechanical or electronic systems or body parts thereby displaying hybridity.⁶² The humanoid robots are very similar to human beings and are created to replicate human beings. Thus, the process of replication may be termed as mimicry, an idea introduced by Homi K. Bhabha in the context of race and culture under the postcolonial discourse. But the same notion can be used in the context of Science in the domain of Robotics as the humanoid robots are bionic men or the human cyborgs are based on a similar kind of mimicry which further subverts the binary thought involved in differentiating man/machine. The humanoid robots such as bionic men or the human cyborgs who are overlaps between man and machine and the result of the contribution of artificial intelligence are an indication that the gap between man and machine has been narrowed down. Thus, a balance needs to be attained in terms of the code of ethics in relation to Robotics and should not be completely tilted towards the human beings. Hence, the significance of “Ayudha Puja” and “Vishwakarma Puja”. Moreover, even in the Vedas there is a mention of “Yantrapurusha” which is a man-machine hybrid that is described in the ancient book Bhagya-Vastu. The “Yantrapurusha” is like a modern-day robot but is made of wood and covered by a human like skin. The system of a “Yantrapurusha” has bolts, springs and iron rods which give motion to the robot.⁶³ They were used to play music and serve the guests. On the other hand, it shows the existence of a scientific temperament in the ancient culture which is in accordance with the idea of postcolonialism.

Environmentalism is a philosophy, ideology and social movement which has come into existence to counter the depletion of the environment at the hands of the human beings. It has happened since time immemorial despite obtaining succor and sustenance from the environment.⁶⁴ The depletion of the environment by man has taken place in many forms such as deforestation for obtaining cultivated lands, creation of urban centers, rapid industrialization leading to increase in carbon footprints, mining for minerals, different types of erosion, anthropogenic climate change, pollution, depletion of water resources leading to water scarcity, destruction of the habitats of wild animals, birds etcetera. The man-made activities are

⁶² “Cyborg vs Bionic – What’s the Difference?” *WikiDiff*. 10 June 2020 <https://wikidiff.com/cyborg/bionic>

⁶³ Yeolekar, Mahesh A. “Robot and Robotics.” *Shodhganga*. 1 May 2020 https://shodhganga.inflibnet.ac.in/bitstream/10603/105099/5/05_chapter1.pdf

⁶⁴ Rowell, Andrew. *Green Backlash*. London: Routledge, 1996.

responsible for this kind of depletion of the environment on the planet Earth. Thus, environment is the entity that human beings have dominated and controlled leading to its depletion. The environment and its various elements were thought to exist for use by man. The environment was seen to be an adversary that is to be championed rather than adopting the idea of integration into the environment or of peaceful co-existence. The spiritual unity that exists in nature among all the living organisms was not recognized. As a result, there was an indiscriminate use of the environmental resources. The Hindus understand environment to mean the natural world which includes the flora and fauna on Earth. They believe that every “atman” is a part of “Brahman”. They posit a spiritual unity in nature.⁶⁵ In Hinduism, the banyan tree is worshipped, the basil leaves are used in the rituals. The Muslim proponents of eco-theology, an understanding of religion that focuses on its relationship with the natural environment, believe that they have a personal and spiritual obligation to curb the spread of environmental degradation because Islam encompasses not only humanity but also nature.⁶⁶ The Christians consider themselves to be the stewards of the environment and its resources on planet Earth. This accounted for how they led their lives and treated the biodiversity resources in nature.⁶⁷ Jainism is a religion of ecology and has turned ecology into a religion. It has enabled Jains to create an environment-friendly system and code of conduct. There is insistence on rationality in the Jain tradition.⁶⁸ In Buddhism, there is respect for the cycle and balance in nature so that nature conserves its resources for the future generations of the living organisms.⁶⁹

Ecological Imperialism is also an idea that comes under the postcolonial discourse and is proposed by Alfred Crosby as per which the European colonizers were successful in their colonization of other territories by deliberate or accidental introduction of animals, plants and diseases leading to the changes in the ecology and the collapse of population of the endemic peoples. The way to counter this kind of ecological imperialism which actually takes a toll on the territory and its population is domestication of such kind of animals and plants whereas diseases can be treated using medicines or for that matter natural immunity can even be developed against the diseases.⁷⁰ An example of this kind of domestication taking place in a region is Bengaluru itself which is home to the flora across the world such as Pink Poui or *Tabebuia rosea* from Mexico, Venezuela and Ecuador, Jacaranda or *Jacaranda mimosifolia* from Brazil, Scarlet Sebesten or *Cordia sebestena* from Caribbean, Sausage tree or *Kigelia Africana* from Mozambique and parts of tropical Africa and many more find a home in Bengaluru but they peacefully co-exist in Bangalore’s ecosystem and over a period of time have been successfully domesticated.

⁶⁵“What does Hinduism teach about the environment?” *Environment*. BBC. 1 July 2020

<https://www.bbc.co.uk/bitesize/guides/zbvqr6f/revision/3#:~:text=Most%20Hindus%20understand%20environment%20to,of%20the%20Earth%20and%20nature.&text=M any%20Hindus%20believe%20that%20nature,is%20a%20part%20of%20Brahman%20>

⁶⁶Bodetti, Austin. “Islam and Environmentalism.” *LobeLog*. 10 May 2019. 10 June 2020

<https://lobelog.com/islam-and-environmentalism/#:~:text=Muslim%20proponents%20of%20eco%2Dtheology,only%20humanity%20but%20also%20nature>

⁶⁷“Christian Ecology.” The Interfaith Centre for Sustainable Development. 1 July 2020

https://www.interfaithsustain.com/christian-ecology/?gclid=Cj0KCOjw0rr4BRcARIsAB0_48MewlRPZacVulova9Im7NeCcc9AtGxr0MdiLB2O4mZInqWky79UWkaAt_xEALw_wcB

⁶⁸“Jain Faith Statement on the Environment.” The Interfaith Centre for Sustainable Development. 1 July 2020

<https://www.interfaithsustain.com/jain-faith-statement-on-the-environment/>

⁶⁹“What does Buddhism teach about the environment?” *Environment*. BBC. 1 July 2020

<https://www.bbc.co.uk/bitesize/guides/z4b42hv/revision/3#:~:text=Because%20the%20Buddha%20did%20not,come%20from%20modern%20Buddhist%20teachers.&text=Most%20Buddhists%20believe%20people%20need,can%20continue%20for%20future%20generations>

⁷⁰ S., Kartikeyan. *Discover Avenue Trees: A Pocket Guide*. Bangalore: Ecoedu Consultants Pvt. Ltd., 2014.

Conclusion

Postcolonialism is a discourse that is all pervasive in terms of dealing with oppression, exploitation and discrimination in any arena. It is a theory that deals with real life issues and tries to restore the rights of the oppressed, the victimized, the exploited and the discriminated people. In its evolutionary phase, it dealt with the rights issues of human beings but later it evolved to deal with the rights issues of non-humans thereby projecting humans as the oppressors, the exploiters and the discriminators in all scenarios. The discourse has currency in the field of Science as discrimination is also prevalent in the field of Science. The future prospect of “Postcolonialism” holds good as oppression will never end although it may change its form and as long as oppression is there postcolonialism will also be there charting new territories for growth and evolution. Postcolonialism has been interdisciplinary since the beginning of the time and remains to be so as it changes its trajectory mapping new fields thereby dealing with the discrimination in those fields. The significance of this discourse lies in the fact that it offers important solutions to the real-life issues. The beauty of the discourse is that it can cater to the needs which arise in each and every field. The essay considers the three founding bases of discrimination in the field of Science namely speciesism, robotism and environmental degradation and tries to subvert them through theoretical arguments which are being converted into reality through actions being taken to resolve those issues. The discriminatory foundation such as speciesism can be undone through the discourse of professed oneness in nature among all the life forms and undercutting the supremacy of any one species. In the case of the code of ethics of Robotics, the code that is inclined towards human beings should also incorporate the concerns related to the robots as they are useful in research set-ups and in the domestic sphere. The environmental degradation can be subverted by generating awareness among people in relation to environmental depletion through the man-made activities and undertaking draconian measures to curb environmental degradation. The boundary of postcolonialism can be further widened by bringing different disciplines within its ambit thereby adding to its interdisciplinarity.

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