



Of Robots And Unicorns: An Ecocritical Study of Postcolonial Science Fiction in Satyajit Ray's *Professor Shonku* Stories

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Abstract

In the 20th century, *kalpavigyan* developed as a literary genre that localised colonial scientific and literary influences. In Bengal, authors replaced the stereotypical European scientist with Bengali *bhadralok* (gentleman) subjects in their fiction, as exemplified by Satyajit Ray's *Professor Shonku* stories. The stories cultivate a critical dialogue with the colonial legacy of science. Professor Shonku, the eponymous hero, is a champion of native techno-scientific knowledge for a global audience. Yet, his stories are embedded with a concern for the natural world that prevents the scientist from inculcating the ideological principle of nature as an exploitable resource. As a predecessor to the Bengali science fiction and fantasy authors who wrote prolifically for children in the 1980s-2000s, Ray's depiction of technological marvels and fantastic discoveries was balanced by his keen appreciation for the natural world.

This paper examines the ecocritical nuances in select short stories from the translated collections *The Diary of a Space Traveller and Other Stories* (2004), *Professor Shonku and the Unicorn Expedition* (2008) and *The Final Adventures of Professor Shonku* (2020). It explores how science fiction enabled postcolonial authors to transgress imperial cognitive realms. It delves into Shonku's interaction with the non-Anthropocene natural world and the environmental ethics of a postcolonial scientist figure. It then reveals the reversal of power dynamics between man and nature that is made possible by the disruptive genre of science fiction. Ray's stories draw on the colonial tropes of exploration, conquest and utilization of nature only to overwrite them with the characters' efforts to prevent the mechanistic appropriation of plants or animals by opportunistic humanity. This paper thus interrogates how these stories creatively challenge the anthropocentric ideals of colonial scientific progress and re-situate the significance of the unfathomable natural world.

Keywords: science fiction, ecocriticism, postcolonialism, Indian literature, Ray, subversion

Introduction

The encroachment of colonial modernity and rational scientific education from the late 19th century prompted the nascence of Indian science fiction in regional languages. In Bengal, the earliest science fiction may be credited to Hemlal Dutt who wrote *Rahashya* or *Mystery* in 1886; that was followed by the scientist Jagadish Chandra Bose's thrilling story of a "Runaway Cyclone" (1896) and Begum Rokeya Sakhawat Hossain's *Sultana's Dream* of 1905. Science fiction soon made its presence known in the field of children's literature with the *kalpavigyan* adventure novels by Hemendrakumar Ray, Sukumar Ray's *Heshoram Hushiyarer Diary* (The Diary of Heshoram Hushiyar), and Premendra Mitra's *Ghanada's Tall Tales* which often interwove socio-political realities with imaginary developments in science. Satyajit Ray, Adrish Bardhan and Leela Majumdar too wrote stories for 20th-century children's periodicals including *Sandesh*, *Mukul*, *Ramdhenu*, or *Ashchorjo*, that were 'fraught with polysemy—since it seems to be a pluralised mix of fantasy, adventure, mystery, and scientific morality tales' ¹. For the urban elite, science fiction heralded the myth of a new techno-revolutionary age in India and writing science fiction for children was an attempt 'to inculcate a rational and scientific temper commensurate with the age'².

Satyajit Ray's ubiquitously popular, ageing Bengali scientist, Professor Trilokeshwar Shonku, who parodies Eurocentric scientific hegemony, began appearing in *Sandesh* in 1961. The *Shonku* stories illustrate Ray's fascination with the intersection of the scientific and natural worlds. Shonku's cultural legacy is inextricable from his utopian innovations- whether it is the 'miracurall' pill, the 'annihilin' pistol, or the 'air conditioning pill'- that seem to be aeons ahead of Western technology. The elements used to devise most of his innovations are usually only found in India's regional landscape and challenge imperialist claims of scientific superiority over nature. Indeed, Karmakar and Ghosh have observed that Shonku's 'scientific undertakings juxtapose Western laboratory-based sciences with a variety of indigenous and local epistemologies' ³. Moreover, it is interesting to note that, within the generic expectations of *kalpavigyan*, Professor Shonku's adventures as a scientist include encounters with supernatural phenomena, mysticism and even phantasmic beings which dismantle Western assumptions about science fiction as a genre that celebrates Western technological advancements. Instead, these stories create a space on tension between the differing knowledge structures of the coloniser and the colonised.

This paper examines Ray's characterisation of the postcolonial scientist, particularly by interrogating his relation and responses to his native environment. Although written for children and young adults, Ray's stories cannot be dismissed as 'apolitical, ahistorical, or ideologically innocent' ⁴. While portraying a recognisable but more scientifically advanced Bengali society than his own, he underscored images of his contemporary socio-political present, especially in the characters' orientation towards nature, both earthly and alien.

This paper arrives at the analysis of these texts with a combination of postcolonial studies and ecocriticism, keeping in mind the ability of literature to serve as a reflection of, as well as a corrective for, 'flawed ways of being in the world'⁵. In *The Ecocriticism Reader*, Glotfelty explains, "Ecocriticism is the study of the relationship between literature and the physical environment...which takes an earth-centred approach to literary studies." ⁶ The colonial

enterprise remains largely associated with the control and exploitation of local natural resources for material benefit. Millennial postcolonial science fiction by authors like Amitav Ghosh, Ruchir Joshi, Rimi Chatterjee and Vandana Singh are therefore overtly critical of the disastrous aftermath of the plundering of India's ecological system. One contends that Ray's humorous stories belong to this tradition of postcolonial science fiction that lends itself to ecocritical readings which reveal warnings for generations of postcolonial subjects regarding the dangers of robust anthropocentrism. In particular, ecocriticism's concern with the idea of consumption may be traced back to Aldo Leopold's influential work in *The Sand County Almanac* which introduced the "land ethic" that "simply enlarges the boundaries of the community to include soils, waters, plants, and animals, or collectively: the land."⁷ It is by considering the land ethic that one is able to identify the ways in which Shonku stories reject the common objectification of land environment.

Jessica Langer's seminal work, *Postcolonialism and Science Fiction* (2011) defines 'postcolonial science fiction' as science fiction which originates from formerly colonised nations⁸. Interestingly, it is only in the past half-decade that the rift between Western and Indian science fiction has begun to be bridged. Indians writing in English, as well as authors of regional languages, have garnered critical scholastic attention in the field of postcolonial science fiction. Bodhishattva Chattopadhyay coined the term '*kalpavigyan*' to refer to Indian science fiction at large, and stated that although 'such stories emerge from a foundation of imperial sciences, their motif is entirely anti-imperial'⁹. Suparno Banerjee's 2020 book *Indian Science Fiction: Patterns, History and Hybridity* too scrutinises the 'colonial and postcolonial politics' of Indian science fiction¹⁰.

Greg Garrard further discussed ecocriticism as exploring 'the ways in which we imagine and portray the relationship between humans and the environment in all areas of cultural production, from Wordsworth to Thoreau to Disney and BBC nature documentaries'¹¹. Since the mid-2000s, scholars also recognised the need for a 'decentering' and globalisation of environmental literary criticism because, 'as fields which have similarly been concerned with the ways in which social reality may be changed, in part, through literary and cultural criticism, postcolonialism and ecocriticism have much in common'¹². Thus, scholars like Rob Nixon, Byron Caminero-Santangelo, Graham Huggan and Helen Tiffin have tried 'to bring environmentalism into a full, productive dialogue with postcolonialism'¹³. This paper orients Shonku's scientific endeavours in the context of such postcolonial ecocritical dialogue.

The Dialectics of Post-Colonial Science and Ecocriticism

Satyajit Ray's scientific mind was nurtured by his exposure to iconoclastic science fiction authors like Jules Verne, H.G. Wells, and Arthur Conan Doyle as well as the influence of his father (Sukumar Ray) and grandfather (Upendrakishore Roy). Sukumar Ray's parodic rewriting of Arthur Conan Doyle's *The Lost World* (1912) in *Heshoram Hushiyarer Diary* not only satirised the European propensity for nomenclature but also served as a direct inspiration for Ray's creation of Professor Shonku. Yet Shonku is more than a comic character. The Shonku narrative begins when an indestructible diary of the eponymous professor who disappeared fifteen years ago is brought to a bewildered editor in the story 'The Diary of a Space Traveller'- 'It all began with the fall of a meteorite and the crater it made'¹⁴. The

following stories, written in the form of lost diary entries, address themes like colonial exploration, pitfalls of modern science, the dangers of human arrogance and greed, the potential of artificial intelligence and amidst these, a ‘deep empathy with all living beings—the bird and the animal kingdom in particular’¹⁵ the last of which constitutes a common feature in Bengali literature for children and young adults. The particular emphasis laid on children’s familiarity with non-human life was a means of reestablishing native kinship ties with nature that colonisation had severed.

The history of colonization is replete with not only domination and commodification of India’s natural resources but also the attempt to classify the unfamiliar natural existence according to Eurocentric knowledge principles. One finds proof of such imperialistic greed in Conrad’s *Heart of Darkness* (1902) or Wilkie Collins’s *The Moonstone* (1868), while a text like Arthur Conan Doyle’s *The Lost World* (1912) reveals a desire to rationalise natural laws. To situate the imperialist agenda in the context of its impact on nature, one may also draw on Ursula K. Heise’s postulation that the colonial systems of resource extraction undercut the inherent significance of human life which is derived from living in synergy with its natural environment¹⁶. The legacies of colonialism remain in the culture, science and geography of the previously colonized nations even after the colonial powers have withdrawn. Bengali science fiction indicates ‘a sign of modernity during the period of colonisation and a critique of this modernity which affected ancient epistemological and cosmological systems of India¹⁷. In building a rocket to Mars, Shonku thereby redefines the relationship between the Anthropocene and the natural environment because he reimagines the significance of natural elements that may seem otherwise inconsequential when contrasted with the grand developments of the mechanical Western world:

‘I knew that no ordinary metal or component could help build a rocket; it would have to be something special. So, I began experimenting with various objects, and finally made a compound, using toadstools, snakeskins and empty shells of tortoise eggs.’¹⁸

The stories demonstrate Shonku’s rootedness in the semi-rural town of Giridih in Bengal which firmly establishes Shonku as an authority on natural knowledge and serves as a reminder of acknowledging the sense of place that permeates postcolonial science fiction. Moreover, as translator Indrani Majumdar notes:

‘Shonku is inclined to put together scientific gadgets with commodities found within his immediate neighbourhood, always using local flora and fauna, herbs, extracts from the roots of trees, ash from a funeral pyre, rainwater and the like. Certainly, in today’s parlance everything he used was strictly organic!’¹⁹.

Being organic is not merely a social accolade but may be correlated with Shonku’s love for natural beings. He interacts freely with both common and exotic creatures. When Shonku and his company land on Mars, they encounter bizarre, aggressive, fish-headed creatures. While interplanetary travel and alien encounters were explored in Bengali science fiction as early as 1892 with Jagadananda Ray’s *Travel to Venus*, Shonku’s adventure is notable because, unlike the space heroes of Western space operas, he is not motivated to conquer the new world he arrives at. Although he has the ‘annihilin’ pistol, he confesses – ‘It was not my aim to destroy

life on this planet, without a good reason' ²⁰, which is more in line with the praxis of environmentalism.

After a long journey through space, they reach Tafa, a planet of hyperintelligent giant ants. Inspired by the giants of Brobdingnag in *Gulliver's Travels* (1726), the ants exhibit a scientific condescension towards the human scientists that is a reversal of the intellectual dynamic between the scientific explorer and the native populace. As the ants observe- 'We find your plain and simple words, your naivety, most entertaining!' ²¹. It is moreover impossible not to relate Ray's giant ants with Premendra Mitra's *Epic of the Ants* (1938) where a race of giant ants takes over the earth in a dystopian future. Bodhishatva Chattopadhyay has discussed how Mitra's story emphasises the scientific development of the non-human species and places their social hierarchy and cognitive capacities above that of humans²². Stories like these, then, in the guise of children's literature, both reverse and unravel the colonial gaze which values human knowledge as supremely powerful, while simultaneously initiating readers to the ecocritical concept of "negotiating between the human and the nonhuman".²³

This decentering of ecocriticism entails its engagement with 'colonial history and cultural difference' ²⁴. For early Indian science fiction authors, the portrayal of nature as an independent entity to be revered was fuelled, in part, by the knowledge of Vedic mysticism that informed much of their writing. Drawing on India's monistic imaginary, predominantly from the perspective of Hindu Vedic studies, native science fictions sought to intertwine 'both history and nature without reducing either to the other' ²⁵. So, it is justifiable to argue that 'Indian science fiction is a product of both the traditional imaginative literature of India and that of European colonial education and scientific ideas' ²⁶. Shonku's stories are proof of this statement in that they have a touch of supernaturalism and inexplicability about them that defy the iron-clad logic of colonial scientific education. Shonku's father, in 'The Tree with the Golden Leaves', was a famous Ayurveda specialist. In 'Shonku and the Bones' the Professor attempts to solve the mystery of an omnipotent Indian mystic who can revitalize a creature from its pile of bones using some ancient chant called the reviving or *sanjeevani mantra*. Yet, Vedic magic trumps scientific knowledge as Shonku is forced to admit, 'Perhaps, in fifty years, science will be able to explain it; but certainly, at this moment, all of it is incredible' ²⁷.

Such stories found an episteme that hails from India's ancient history of relying on and communicating with primal forces of nature. They rewrite the narrative of instrumentalizing or enslaving nature because the presence of such forces, understandable only by a scientific man who still believes in extra-scientific possibilities, proves that there are powers in nature that even the advancement of science cannot subordinate. On one hand, these resist the suppression of Indian knowledge systems by colonial intellectualism. On the other, they illustrate how Indian science fiction combines 'faith in techno-utopianism with traditional indigenous philosophy that uses myth and folklore to negotiate external reality' ²⁸.

Ray introduces a plethora of new plants, animals and lands to defamiliarize an otherwise familiar late 20th-century world and systematically destabilise the colonial mission of finding, naming and archiving every living being that was at the heart of 19th century imperial crusades. Ray's stories are evidence that the colonial subjects 'hybridized'²⁹ the imperial knowledge systems of science and technology as they recognised that 'the colonial

enlightenment must be placed in a dialectical negotiation with the indigenous cultural formations’³⁰. Ray’s eco-awareness is also reflected in his films *Aranyer Dinratri* (1970) and *Agantuk* (1991) where he ‘points out the destructive potentials of modern science and technology by evoking the shadow of the man-made global disasters throughout the twentieth century’³¹.

In ‘The Tree with the Golden Leaves’, Shonku devotes himself to a study of a quest to discover the mysterious *saptaparnee* or golden-leaved tree to heal his father’s illness when modern, or rather Western medicine, has failed. He seeks an herb that is mentioned in the ancient Sanskrit book of Ayurvedic medicine, the *Charak Samhita*³². Thus, Shonku relies on *ayurveda*, an ancient Indian bio-chemistry to invent his ‘miracurall’ pill, demonstrating the forgotten potential of pre-colonial native sciences. It is not surprising then that this invention must remain outside capitalist motivations. Shonku is inclined to observe: ‘You just heard, all I’ve done regarding this medicine is to locate this tree. And its virtues are nature’s contribution.’³³ In safeguarding the pill, Shonku is even situated in a conflict between a Jewish professor and a terrifying Nazi leader, an interesting dynamic which demonstrates the ability of Bengali science fiction to critique geopolitical concerns. The acquisitive streak of the anti-Semitic, colonizing villain is used ingenuously to underscore the mercantile motivations of every authoritarian, expansionist regime.

In Indian science fiction, the explorer is, therefore, ‘a saviour and not an exploiter’³⁴. Shonku’s actions testify that science fiction written by a postcolonial subject must constantly oppose any attempts at assimilation into the colonial fold, including the temptation of financial gain at the cost of exploiting native nature and society. Ray’s ideals are inherently eco-centric in their valorization of ‘localism and resistance to international capitalism’- both values that unite postcolonial and ecocritical stances³⁵. Like Ray, Shonku is a cosmopolitan man, a citizen of the world who has friends in the international scientific community and travels widely, but in spite of his pioneering successes that make him second only to Edison, Shonku is inextricably linked to the socio-cultural fabric of India.

Close Encounters with Nature and the Reversal of Power Dynamics

The intrinsic respect and reverence towards nature which inform so many Shonku stories overturn the narrative of modernist instrumentalization of nature and the ‘conquest of nature’ trope which is common to most imperialist adventure narratives. Shonku’s adventures keep up with their ecocritical potential and their ethical moorings when one recalls Leopold’s observation that “a land ethic changes the role of *Homo sapiens* from conqueror of the land-community to plain member and citizen of it. It implies respect for his fellow members, and also respect for the community as such”³⁶. In ‘Shonku and the Primordial Man’, for instance, Ray’s narrative is focused on a scientific process which seems to reverse evolution. However, it soon becomes obvious that it is another scientist who has been captured and, using a drug called ‘Evolution’, has been regressively devolved to resemble a primitive species, thereby providing a stringent assessment of the aftereffects of humanity’s disruptive intervention in nature’s biological processes. Shonku’s statement that ‘it’s best not to tamper too much with evolution. Let nature take its own course’³⁷ attempts to discourage a blind reification of science as homogeneously beneficial for man. It is evident that Ray’s stories adhere to the rubric of

postcolonial science fiction in that they analyse ‘the limits of scientific research’³⁸ from the perspective of an Indian scientist who believes there are mysteries in the natural world that humans can never unravel. The acknowledgement of the unfathomability of natural laws offers nature precedence that the Western scientific temper was reluctant to accept.

In the collection, *The Unicorn Expedition*, Shonku is closely associated with the animal world as in stories like ‘Shonku and the Gorillas’, ‘The Mysterious Island’ and ‘The Unicorn Expedition’. In his run-in with the gorillas, Shonku travels to the remote forests of Africa where it is discovered that the rogue scientist Massingham controls an army of gorillas, a situation which echoes the modern man’s attempt to control all non-human species like a totalitarian dictator.

If a man, or any creature belonging to a species that is seen as a forerunner of man—monkeys and gorillas, for instance—could be made to wear such a hat, he (or it) would immediately become a machine that Massingham could control completely.³⁹

With knowledge of genetic mutation and animal experimentation, Ray’s evil scientists undermine individual freedom. By extending this projection of colonial territorialism from the animal species to threatening human sovereignty, the story urges readers to consider how the ‘current crises of ecological mismanagement’⁴⁰ in the country may be tied to historical legacies of control, expansion and displacement. It is not enough then for the gorillas to be liberated, this technology must be completely erased as well.

In ‘The Mysterious Island’, Shonku travels to an undiscovered island ‘Florona’ where the vegetation has a steady diet of human intellect: ‘The food for the trees and plants on the island called Florona, their means of survival, was the knowledge stored in a human brain’⁴¹. On this island, Shonku is intoxicated by the scent of the flowers, rewriting the dynamics of resource exchange between man and nature. Instead of humans drawing on nature till it withers, under the banner of scientific advancement, an alien natural power quite literally consumes that rapacious human intellect rendering the leading scientific minds completely ineffectual.

In one of the final stories, Shonku attempts to find the mythical unicorn in Tibet. Here too, history and nature interact freely while science is continually questioned. Ray’s discussion on archaeological remains and texts by Aristotle and Pliny that suggest that unicorns, or some type of one-horned bull once existed in India, once again foreground the importance of connecting Indian science fiction to historical moorings. The limits of technology and science are expanded with the help of local knowledge, during the journey to find unicorns in the Himalayas, as Shonku discovers a substance that defies gravity and makes flight possible. The portrayal of the unicorns themselves is ingenuously handled for Ray creates a unique Edenic space called Dung-lung-do filled with every mythological animal where scientists confess- ‘Do you know, Shonku—not a single tree here is familiar to me? This is a completely new environment’⁴². To inscribe in science fiction a realm of nature striding the boundaries of real and unreal, imaginary and factual, is to remind readers that the imaginative prowess of man-made scientific exploration cannot capture the essence of liminality and ephemerality inherent to nature. Moreover, Ray’s utopic vista of unspoiled nature that ranges back to pre-

historic times makes it all the more jarring that such utopias are under increasing threat of being subsumed by the Anthropocene in reality.

Conclusion

Ray's *Professor Shonku* stories strive to establish a more equivocal human-environment relationship by replacing the Western scientist with a postcolonial scientist who relies on both Western scientific techniques and indigenous epistemes. Although belonging to the twentieth century, the stories serve as a testament to Glen A. Love's statement that "the most important function of literature today is to redirect human consciousness to a full consideration of its place in a threatened natural world"⁴³. Shonku's, or more precisely, the Indian scientist's love for animals, his awe of nature, his acceptance of the enormous mysteries of the universe that no manmade technology can fully fathom correspond to claims of postcolonial ecocriticism in that they engage with colonial history while dismantling its legacies. Interestingly, some eco-critics have described the environment as 'a myth, a grand fable, a complex fiction, a widely shared, occasionally contested and literally ubiquitous narrative'⁴⁴ whose reality depends on how people write or speak about it. This implies that, like other socio-realistic constructs, our ways of seeing the environment are indubitably anchored in the cultural reality the society is immersed in. Science fiction, too, is a cultural product that 'reinforces, questions, or rejects the dominant culture by endorsing alternative norms and values, residual cultures or future emerging cultures'⁴⁵. Hence, it is possible to conclude that the Bangla science fiction authors who inaugurated and popularized the Indian tradition of science fiction set precedents for the millennial perception of man and nature in the Global South.

Shonku's adventures join the behemoths of science fiction like Isaac Asimov, Ursula K. Le Guin, and Dorothy L. Sayers century in their prediction of problems that modern man must face when he treats nature with utilitarian principles. Chattopadhyay also acknowledges that while authors like Adrish Bardhan, Anish Deb, Leela Majumdar and Sunil Gangopadhyay continued writing science fiction adventure stories for children, the abundance and influence of Ray's literary corpus remained unmatched⁴⁶. In fact, it would not be hyperbolic to state that Satyajit Ray's stories sparked off a literary revolution that is ongoing- the struggle of Indian authors to 're-map' the terrain that colonial science had once imposed on the Indian imagination⁴⁷. In a posthuman, transnational, decolonised world, this remapping of human-nature dialectics therein calls for an immediate reevaluation of humanity's modes of viewing the living world in self-critical ways that Shonku had recorded.

Notes

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