

THE CALCUTTA CHROMOSOME AS A HYBRID FICTION

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Abstract

*With the publication of his latest nonfiction book *The Great Derangement*, Amitav Ghosh dwells on the gravity of climate change and expresses his surprise at not finding this topic being figured in the modern mainstream fiction. What strikes him as anomalous is how the issue of climate change has been relegated to category of science fiction while the mainstream literary fiction focuses itself exclusively on cultural and social issues. This dichotomy between science and culture he finds arbitrary. He propounds hybrid fictions on the argument that this hybridity can alone enrich literary fiction and the separation between the two, literary and science fiction is a loss and damage to the art of fiction writing. Surprisingly enough, while writing *The Calcutta Chromosome* which was published in the year 1996, twenty years before the publication of *The Great Derangement*, Ghosh had already attempted what he theorized in *The Great Derangement*: hybrid fiction. The objective of the present paper is to analyze *The Calcutta Chromosome* as a hybrid fiction. The context of the ideas of *The Great Derangement* will provide a framework within which *The Calcutta Chromosome* will be critiqued as a hybrid fiction.*

Key words: hybrid fiction, science fiction, mainstream fiction.

In his latest nonfiction *The Great Derangement: Climate Change and the Unthinkable*, Ghosh bemoans the absence of the issue of climate change from modern fiction. Even if there are a few novels that have been written pivoted on climate change, they have been relegated to a separate genre of science fiction. He says in the book:

To introduce such happenings into a novel is in fact to court eviction from the mansion in which serious fiction has long been in residence; it is to risk banishment to the humbler dwellings that surround the manor house---those generic outbursts that were once known by names such as ‘the Gothic’, ‘the romance’, or ‘the melodrama’...and ‘science fiction’ (32).

Thus, he says, there is a separation of science fiction from the literary mainstream....(88). While delving into this issue of separation of science from the literary mainstream, he strives

to find out the reason and refers to Bruno Latour “who argues that one of the originary impulses of modernity is the project of ‘partitioning’, or deepening the imaginary gulf between Nature and Culture: the former comes to be relegated exclusively to the sciences and is regarded as being off limits to the latter.” (92). Ghosh further refers to Latour and opines as to why this separation is encouraged. He writes: According to Latour the project of partitioning is always supported by a related enterprise, one that he describes as ‘purification’, which is intended to ensure that Nature is consigned entirely to the sciences, remaining forever off limits to Culture. (95). Ghosh is somewhat pained at this arbitrary partitioning because it is for him an unnecessary effort at compartmentalizing fiction and he says, “this entails the marking off and suppression of hybrids---and that, of course, is exactly the story of the branding of science fiction, as a genre *separate* from the literary mainstream (95-96).

The nonfiction *The Great Derangement* was published in 2016 and as has been seen above, Ghosh was not comfortable with the separation of genres into science or mainstream serious fiction. His creative forte is inclusive and encompassing that refuses to be limited and constrained by artificial boundaries that attempt to draw lines in order to partition genres artificially. This exactly he transcended in his fiction *The Calcutta Chromosome* that was published way back in 1995, though what he attempted there in fiction form, he expressed theoretically in the nonfiction *The Great Derangement* published in 2016. The present paper attempts to analyse *The Calcutta Chromosome* in view of the premise that in this novel Ghosh transcends what he calls in *The Great Derangement* “Suppression of hybrids” (95) for as he says in the book that in this separation of genres “it is literary fiction itself that has been diminished by it” (96). Thus, it will be presented in the paper that *The Calcutta Chromosome* is a hybrid fiction where science and culture, science and non-science have been interwoven so seamlessly that the notion of absolute separation of science and literary fiction has been falsified.

The Calcutta Chromosome takes a quantum jump by confounding category-making and line drawing tendency of the reader as well as that of the critic. Though the novel has been awarded Arthur C Clarke Prize for science fiction, any attempt to categorize it within the said slot will be misleading. The storyline amalgamates occult, science, matter, anti-matter, mind and the other-mind in such an inextricable way that it becomes well-nigh impossible to categorize the novel only as a science fiction. The genre crossing extends to the boundaries of science merging with that of occult; the matter gives way to the manipulations of non-matter; and the pragmatic and experimental research in the field of malaria is usurped by those who swear by the most esoteric and unscientific ambition of the transference of souls. J.D Soni considers the novel “kaleidoscopic in structure” since it makes the reader “accommodate willingly the world of disbelief, and the world ‘unknown’ as the writer calls it ‘science to the world of ‘non-science’”(197). Soni also refers to the dissolution of boundaries in the novel when he observes that in the book “the skillful blending of literature, science,

philosophy, history, and psychology and Para-psychology results in an attempt to survey the past in connection with the present anticipating certain echoes in the future” (198). Like the mainstream historiography that tends to segregate and divide nations, the mainstream academic and scientific pursuits also, in their attempt to be specialized, isolate themselves and thus form a wall of separation and exclusiveness. Literary and creative writers too make this mistake of forcibly divorcing Nature, science and cultural milieu. It is here that The Calcutta Chromosome takes a detour into an area of hybridity.

The story begins somewhere in the 21st century. Antar, an employee of the International Water Council, is shown sitting in front of Ava, a sophisticated and highly advanced system. He is scanning inventory of varied objects that skim on the screen of the system. While the routine inventories are flashing on the screen, Ava gets stalled because it has experienced a sense of incomprehension at encountering a scrap of paper that is a remnant of an ID card. Antar knows unless Ava, an super intelligent machine classifies and identifies the object it will keep on throwing image of the object on the screen with incessant regularity. Pressing of few buttons on the key board of the system, Antar lets Ava plunge into the archives of the Council to retrieve material that would help to identify the man the ID of whom has flashed on the screen. The man is Murugan, ex-colleague of Antar at Life-Watch, an organization where Murugan and Antar once worked. The message flickers: “subject missing since August 21, 1995” and “last seen Calcutta, India” (CC 19).

There are indications that we are in for a science fiction in the tradition of H G Wells and Isaac Asimov--the time setting somewhere in future, remarkably intelligent machine Ava that is even capable of producing three dimensional images and Antar, a trained programmer and systems analyst. But as the life story and adventures of Murugan unfold, it dawns on the reader that he is about to enter the world that refuses to admit the borders between science and counter-science. The lines that are strictly drawn between the domains of causation and the real world on the one hand, and that of occult and the unreal on the other, prove to be no more than shadow lines. The domain of science is going to be encroached upon by those who do not claim to be elite in science or even educated in normal sense. They are the subaltern and their infringement presents a state of mutability and variability that crashes the boundaries laid down by science as to exclude those who are non-rational, illiterate and ignored. It is an amazing hybrid world.

The information about Murugan who is reported missing since 21 August 1995 and who has last been seen in Calcutta on the same date is presented when Ava goes into a retrieval mode and Antar rakes up his memory regarding his meeting with his erstwhile colleague in the Life Watch. His friends call him “Morgan” (CC 29) and he is described as a “Corky little roaster of a man” (29). Besides his other peculiarities, we come to know that while teaching in a small college in New York “he came to be increasingly interested in one highly specialized aspect of this subject: the early history of malaria research” (30).

Murugan's quest centers on the research career of the British scientist Ronald Ross who was awarded the Nobel Prize for his work on the life-cycle of the malarial parasite. His research on the material regarding Ross is so thorough that from 1895 to 1898, the time Ross was involved in the malarial research, he can produce detail of each and every day spent by the scientist.

The flip side of the quest of Murugan is that he is interested not only in the known part of the research of Ross and his search is not guided merely by the scientific interest in the story of Ronald Ross. There is an unknown part of the story that intrigues him more than what is generally known to the world. It is here that he enters the world of subaltern and the border crossing takes place when Murugan informs Antar that there was an obscure part of the research career of the said scientist. He holds to the "Other Mind": a theory that some person or persons had systematically interfered with Ronald Ross's experiments to push malaria research in certain directions while leading it away from others" (CC 31). He believes that there was a team that "was already ahead of Ross on some of this research" (CC87). Utmost secrecy was an indispensable part of their religion and they manipulated the situation around Ross in such a way that it looked as if Ross had made the discovery. While the truth was that they planted persons in such a clandestine way that it looked as if Ross stumbled on the findings.

The other team that always operated on the secret mode was headed by a certain illiterate woman named Mangala. She worked in the laboratory of Cunningham, predecessor of Ross, and "she was way ahead of Cunningham in her intuitive understanding of the fundamentals of the malaria research" (CC 202). In fact, she and her helper Lutchman had no interest in malaria itself. Through the scientific findings of others "they were after the biggest prize of all, the biggest fucking ballgame any human being has ever thought of: the ultimate transcendence of nature" or "technology for interpersonal transcendence" (CC 90). She had stumbled upon an amazing treatment of syphilis that in 1927 was to win Wagner-Jauregg the Nobel Prize. Wagner-Jauregg showed that artificially induced malaria often cured, or at least mitigated, syphilis paresis. "From what we know of her [Mangala's] technique, [. . .] she had developed a strain that could actually be cultivated in pigeons. My hunch is that she found some way of making the bug cross over, so that the bird could be used like a test-tube or an agar plate" (CC 205). She was an observant woman and during her treatment she began to notice "weird side effects" and "strange personality disorders" (CC 206) in the patients. Mangala knew that there existed a close relationship between the malaria bug and the human mind. "Fact is", as Murugan tells, "malaria does stuff to the brain that we're still just guessing at" (CC 46). She believed that once the life cycle of the parasite is known "it would spontaneously mutate in directions that would take her work to the next step" (CC 208). Therefore, it followed that the knowledge of something also helps in changing that thing. That is why this esoteric team prodded Ross in the direction of discovery so that his knowing might bring desired mutation in the bug and help in their wacky pursuit of transmigration of

souls. And since their method entailed secrecy they wanted to “make it look like he’s [Ross] found out for himself” (CC 89).

The discovery that Mangala bumped into is named “Calcutta chromosome” by Murugan and he believes that this team had been remarkably successful in their objective of continuation of personality from age to age. The spirits of Mangala and Lakhan are reincarnated in Mrs. Aratounian and Roman Halder respectively and it looks that Urmila is chosen as the medium to carry further the spirit of Mangala.

It is remarkable that the novel starts with the note of science and very soon dissolves into counter science. The boundaries of science are exploded and they merge with that of the counter science in such a way that the “cross-over” from one to the other has consequence of dissolution of frontiers that seemingly separate one area of inquiry from that of the other. The other team that belongs to the occult or non-science represents the least dominant class that is easily ignored or neglected by the mainstream class of scientific minds that least bother about what happens at the level of irrational. If the scientific pursuit of Ross is egged on by those whose interest is not even remotely connected with that of science, the quest of the other team depends on the empirical results of science.

The coinage of the expression “Calcutta chromosome” by Ghosh is another instance that is indicative of hybrid fiction that he is attempting. Chromosome, as we know is a structure in cell that carries the gene that is passed on from generation to generation by sexual reproduction. Each chromosome has its two copies known as homologous pair. The Calcutta chromosome of the counter science, on the other hand, contains characteristics that provoke an extension of limits of science since it challenges an accepted and defined meaning of the term chromosome. The premise of the counter science intends to awaken science to the limitations of its defined confines; it is stimulation to science to break out of its borders and enter a strange amalgam of pure science and cultural belief structure of transmigration of souls.

The process underlying the presence of the counter science and the success of this in bringing forth the transference of souls is an evocation for breaking down the precincts of an accepted knowledge. The implication is to go beyond the accepted limits of science. The Calcutta chromosome stands for that object which is capable of dissolving differences between science and non-science. The concept of Calcutta chromosome can be regarded as a metaphor for wholeness, hybridity—an attempt to transcend artificial limits. These artificial limits are shattered by those whose presence matters least in the world of science; they come from the class that stands for the dominant cultural ethos of the times and here they make an inroad into the domain of science and create blending that is unheard of in the field of fiction where genres are sharply demarcated. In the novel science and non-science, real and unreal, myth and reality are presented as parts of whole. Pradeep Tripathi opines: “The novel is likely to become a literary touchstone for its content technique” [. . .]. (257). What he alludes to is the remarkable heterogeneous combinations in the novel. The divisive lines of thought that

presupposes an existence of dividing borders between the East and the West and even supposedly distinct genres of fiction seem to evaporate in the light of the settings of the novel where the European rationality and the Indian belief in reincarnation juxtapose with ease.

Some critics have also described the book as a manifestation of post-colonial literature that deliberately marginalizes the centre or the colonizer and concedes a superior position to the colonized. Post-colonial consciousness generates “plurality of voices” as Robert Stam opines (129). According to Madhumalati Adhikari the post-colonial literature has produced “high quality counter-canon” that has “exploded the myth of Western supremacy” (178). Adhikari suggests that through the story-line of the novel, the writer intends to demarcate the boundaries between matter and anti-matter and science and the counter-science with an objective of maintaining the superiority of the latter. According to her: “If ‘matter’ and ‘science’ were the stronghold of the occidental world ‘anti-matter’ and ‘counter-science’ was controlled by the occidental. It is a suggested conquest by the East of the West” (180). As an instance she quotes that the colonized Mangala is the upholder of the cult of secrecy and by this means she wields control over Ross, Farley, Grigson, Cunningham and all those who swear by the European principle of rationality.

This segregation and the relative superiority of one over the other has never been the intention of the novelist. Had it been so, the dependence of the other team that represents the cult of secrecy on science would never have been emphasized. As a matter of fact, the pursuit of the counter science is not fructified unless it gets necessary support from the science. That is the reason that they had to direct Ross in a particular direction because it is through his knowledge that they can further their experimentation. As Murugan puts their dependence on the empirical science: “If it’s true that to know something is to change it, then it follows that one way of changing something—of effecting a mutation, let’s say—is to attempt to know it, or aspects of it” (CC 88). It is somehow through Ross’s research that conducive conditions are created which are required by the Mangala group for their objectives. This is an instance of hybridity not with an intention of proving or disproving the position of any party. Hind Wassef’s observation on *The Calcutta Chromosome* reflects the same idea. He says: “Concepts of nationality are exploded and supplanted by a literary no-man’s land where everyone in the novel turns out to be somehow linked together by their relationship to the research on malaria” (93). He further enumerates on the vision of Ghosh. He says: “The common element between internet, folklore and disease is that they all cross boundaries and succeed in connecting people and drawing attention to their common attributes and weaknesses” (93). *The Calcutta Chromosome*, therefore, is such novel that defies any attempt to categorize it strictly in the slot of science fiction. The conglomeration of diverse and opposite elements to form an inclusive unit/whole is the purpose of the novel. It is what Ghosh has attempted in *The Calcutta Chromosome*; this experimentation at amalgamation of genres is dwelt upon in *The Great Derangement*. This effort is the result of an implicit manifestation of Ghosh’s inclusive vision.

Thus The Calcutta Chromosome of Ghosh is an epitome of what he later would espouse in The Great Derangement: “the expulsion of hybrids” (96) has had an adverse impact on the art of fiction writing; and Ghosh regrets this expulsion “for it is literary fiction itself that has been diminished by it” (96). Ghosh enriches literary fiction by inclusion of hybrids.

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