



---

**Myth and Magic Realism in "The Calcutta Chromosome" by Amitav Ghosh**

**Minoo Kantha**  
**Research Scholar**  
**Department of English**  
**T.M.B. University, Bhagalpur**

**ABSTRACT**

Myths explain natural or social occurrences using deities, heroes, and supernatural components. Society relies on myths to teach morals, explain origins, and define identity. They often address fundamental human issues regarding existence, creation, and the universe. Myths are important in many cultures' religious rites. They foster social norms and values, shaping behaviour and beliefs. Myths can also represent a community's history and experiences, evolving to address current challenges. They often revolve around creation, conflict, transformation, and the divine-human relationship. Cosmogonic myths describe the world's origins; etiological myths explain practices or phenomena; and hero myths depict people's journeys and struggles. Modern people regard myths as fiction, although they help explain cultural psychology and worldview. They still affect literature, art, and popular culture, proving their significance. Myths connect the past and present, revealing human values and beliefs.

Magic realism combines the surreal with life, presenting remarkable happenings as commonplace. Latin American literature inspired this style, which is now popular worldwide. Magic realism treats magical elements as commonplace, typically intertwined into social, political, and cultural narratives. This dreamy world combines everyday activities with magical or strange experiences without explanation. Vivid descriptions make magic seem real to readers. Magic realism explores culture, identity, and history, revealing human complexity. Readers are encouraged to doubt truth and reality by blurring reality and fiction. Gabriel García Márquez, Isabel Allende, and Salman Rushdie are notable authors connected with magic realism; "One Hundred Years of Solitude" is an example. Mikhail Bulgakov's "The Master and Margarita" and Neil Gaiman's "The Ocean at the End of the Lane" are both magic realism. Magic realism encourages readers to embrace life's wonders and mysteries in a new and inventive way.

This study examines myth and magic realism in Amitav Ghosh's novel *The Calcutta Chromosome*. *The Calcutta Chromosome* weaves myth and magic realism into its story about identity, history, and the dynamic relationship between science and the supernatural. The narrative is set in colonial India and uses a non-linear framework to switch between historical and modern timelines and numerous views to challenge established narrative formats.

**Key words: Myth, magic realism, identity, and postcolonial India.**

## **Full Paper**

Amitav Ghosh is a well-known Indian writer whose works often deal with themes of identity, culture, and history. "The Calcutta Chromosome," one of his most famous books, explores how history, science, myth, and magic all come together. Within this extensively plotted novel, colonial India serves as a backdrop to the story of malaria's discovery and the life of Nobel laureate Sir Ronald Ross. In his analysis of the social effects of scientific discoveries, Ghosh employs a mix of historical fiction and speculative narrative techniques. The novel disrupts conventional storytelling with its nonlinear structure and intertwining of several timeframes, making readers rethink the nature of knowledge and the relationship between human activity and fate. The way Ghosh skilfully interweaves cultural commentary and scientific research in this work makes it a noteworthy addition to modern literature. It showcases his talent for crafting complex stories that touch readers on several levels.

The interaction between myth and historical narration is the main theme of this work, which examines historical individuals, focusing on malaria researcher Ronald Ross. Ghosh uses a mythological framework to reinterpret Ross's achievements, arguing that knowledge is both spiritual and scientific. The novel claims that history is a mythological narrative rooted in cultural memory. This approach follows the idea that myths explain incomprehensible and connect varied human experiences. Ross's discoveries are intertwined with Calcutta's mystical characteristics, which are nearly a character in Ghosh's work. The city's complex history, colonial past, and rich culture create a world where the supernatural and ordinary coexist. The incorporation of myth into history raises questions about truth and history's interpretation.

According to Bower, "*Amitav Ghosh shares a similar insider/outsider position, although his form of magical realism is less exuberant and less ubiquitous than that of Rushdie. There are two sources of magical realism in Ghosh's The Calcutta Chromosome [1995] 1997). The first source verges on science fiction, as Ghosh's novel includes extremely advanced compute technology, which allows the computer to have its own personality and the ability to seek out globally the smallest fact in seconds. The second source is more mystical and follows the story of a religious sect who are endowed with the capacity for metempsychosis in that they are able to transfer their souls from one body to another across generations.*" 1

According to Angel Flores, *magical realism involves the fusion of the real and the fantastic, or, as he claims, "an amalgamation of realism and fantasy."* 2  
*Magical realism is "an expression of the New World reality which at once combines the rational elements of the European super-civilisation and the irrational elements of a primitive America," claims Ray Verzasconi and other critics. Gonzalez Echchevarria feels that magical realism presents a world view devoid of objective reality or natural or physical rules. Still, the fictional universe is not apart from reality either.* 3

Franz Roh, a German art critic, was the first to coin the term "magical realism" and regarded it as an art category. Ghosh employs magic realism to blur reality with fantasy. Murugan, for example, pursues knowledge that leads him into the unknown. He meets a variety of people—some actual, others mythological—who demonstrate the malleability of perception and the subjective nature of reality. The novel's depth and complexity are enhanced by strange elements like Murugan's visions and the ambiguous past-present relationship. Ghosh uses magic realism to investigate colonialism and identity beyond linear narratives. The narrative claims that scientific data and

individual and collective mythology shape reality. Murugan's quest for understanding is marked by encounters that challenge his rationality and broaden his worldview.

Ghosh explores cultural syncretism and identity in myth and magic realism. Characters navigate a terrain where conventional beliefs and empirical study collide, representing postcolonial complexity and synergies. Diversity in cultural narratives highlights the complexities of identity in colonialism. In the narrative, Mrs. Aratounian and Mangla are the mysterious goddesses representing indigenous knowledge systems' resilience against colonial encroachment. Their experiences challenge Western narratives by combining traditional and modern knowledge. Myth empowers characters to assert their agency and navigate colonial identities. Through myth and magic realism, Ghosh explores important philosophical questions about knowledge, existence, and human complexity. The story questions rational reasoning and the invisible forces that shape human life. Scientific study and mystical philosophy show that a complete comprehension of the world requires both empirical investigation and the illusive parts of human experience. The narrative's circular pattern connects the past and present in this intellectual examination. The "chromosome" symbolises the complex relationships between all things. The tale indicates that knowledge is a complicated network of links, where historical background informs modern understanding and mythology connects the two realms.

In "The Calcutta Chromosome," Amitav Ghosh brilliantly blends myth and magic realism to challenge history and truth. Ghosh creates a comprehensive story that captures human experience by exploring cultural identity, the supernatural-empirical relationship, and knowledge's nature. The story challenges readers to think critically about truth and reality while recognising the power of myth to help them navigate postcolonial life.

The narrative may be categorised within the realm of science fiction, as it draws upon Ronald Ross's biomedical endeavours in the pursuit of the malaria parasite. The narrative unfolds in the twenty-first century, centring on the character of Antar, an Egyptian computer prodigy residing in New York, who encounters a significant obstacle due to a malfunctioning identity card associated with a computer. He discovers that the individual who has gone missing is L. Murugan, a fellow academic and researcher affiliated with Life Watch who has also engaged in significant scholarly inquiry into the medical history of malaria. He inferred that the esteemed Nobel Laureate Ronald Ross, recipient of the Nobel Prize in 1906 for his seminal research on the life cycle of the malaria parasite conducted in 1898, found himself ensnared in a labyrinthine predicament, ultimately guided towards the correct path by the intervention of others. The author elucidates the fundamental themes of the novel through the employment of magical realism and mysticism. In engaging with the clandestine faith of silence, he intertwines elements of mysticism.

As adherents of a clandestine religious order, Mangala and Lutchman hold a profound belief in the potency of silence, striving diligently to maintain the obscurity of their identities.

*“What he saw next was even more startling than what has passed before [...] It was not the young assistant but the woman who went over to the stack of drawers by the wall; it was she who selected the slides that were to be presented to him (Ronald Ross). Farley saw her picking the slides out with a speed that indicated she was not only thoroughly familiar with the the slides but exactly know what they contained. Farley ‘s mind began to spill over with questions: how had a woman, and an illiterate one at that, acquired such expertise?” (TCC 125 )*

The narrative refrains from fully elucidating the ideologies and aspirations of this clandestine organisation, as such revelations would contravene the established code of secrecy. The narrative depicts these figures as the architects of the most groundbreaking invention in the annals of medical history, illuminating their precocious advancements in malaria research, which predate those of Ronald Ross. Ghosh elevates the significance of Indian culture over Western rationality by employing elements of magical and fantastical realism, intricately weaving in aspects of supernaturalism, mysticism, and myth. Indian culture is rich in myths regarding the creation of the world. Diverse narratives exist, including the cosmic being Vishnu generating the creation from the ocean of chaos and the account of Brahma conjuring the world from his own thoughts. One such myth that the human body can be everlasting by altering bodies just like a man changes clothes attainable that too with some vectors of illness has been exploited as a fundamental myth in this particular tale. Ghosh utilises Ross' Memoirs, published in 1923, to establish a factual underpinning for the novel's imaginative occurrences. The narrative centres on malaria, particularly the conditions that led to the revelation that female mosquitoes serve as the vectors of this affliction. The date of "20 August," for instance, is observed as World Mosquito Day and holds significant importance in Ross's empirical demonstration of the transmission of malaria. In the initial section of the novel, Ghosh adeptly utilises the date as a chronological framework. Nevertheless, the narrative unfolds with Murugan's arrival in Calcutta in 1995, driven by his quest for an anomalous chromosome. The discourse surrounding the Nobel Prize, particularly the exchanges between Ross and Giovanni Battista Grassi, bears a striking resemblance to Murugan's analysis, which posits that Ross' findings were steeped in layers of intrigue and deception. Consequently, numerous characters within the novel are drawn from historical figures, meticulously crafted from fragments of correspondence and various materials that Ross incorporated into this autobiographical narrative. The narrative, conversely, elucidates a post-colonial perspective on the functioning of science.

Julius Von Wagner-Jauregg was awarded the Nobel Prize in 1927 for his groundbreaking discovery that artificially induced malaria could potentially heal, or at the very least alleviate, the symptoms of syphilitic paresis, a finding remarkable for its occurrence in an era when the underlying mechanisms remained largely enigmatic. Nevertheless, the clandestine Indian syndicate, under the leadership of the enigmatic Mangala, had already attained a significant advancement in this area of inquiry, notably preceding the Europeans in the 1890s. This collective has successfully developed a strain of malaria that is capable of being cultivated within pigeons. Among the primary objectives of this woman was the pursuit of a remedy for syphilis, a sexually transmitted affliction, achieved through the administration of the malarial germ to the patient via the avian intermediary. In the course of their investigation, they unearthed a peculiar chromosome that had successfully evaded the most recent detection and isolation methodologies. Furthermore, the intentions of Mangala and her colleagues are subtly suggested throughout the narrative. In essence, their aspiration was to attain a form of 'immortality' through the formulation of a method for the inter-personal transference of human attributes, wherein all information could be conveyed chromosomally from one corporeal vessel to another. Mangala embodies the archetypal maternal figure, akin to the goddess Kali or Durga, encompassing her profound regenerative capacities. Mangala's research reached an impasse in 1897 following a succession of experiments, leaving her in urgent need of an individual to carry forth the project.

*“Raising her voice, the woman said to the crowd, in archaic rustic Bengali: ‘The time is here; pray that all goes well for our Laakhan, once again.’ (TCC 144)*

At that moment, Ronald Ross, the eminent scientist credited with the discovery of the malaria-carrying insect, was fortuitously in proximity. Following a succession of unsuccessful endeavours, she arrived at the realisation that advancement with the prevailing malaria strains was unattainable. She meticulously instilled the necessary clues and knowledge within Ross's consciousness, subsequently orchestrating his experiments with precision to elicit the behaviour she sought.

Within the narrative, the themes of transmigration and immortality emerge as focal points of exploration. The rudimentary representations of Mangla and Lutchman, adherents of a belief system that posits the immortality of the soul and perceives death merely as a transformation akin to changing garments, embody a conviction in the perpetuity of existence. The narrative employs the technique of magic realism, artfully intertwining and contrasting elements of imagination and reality, alongside extraterrestrial and supernatural machinery and enigma, with tangible historical occurrences. Upon his youthful sojourn to Renupur, Phulboni finds himself amidst spectral apparitions and ethereal entities, each endowed with enigmatic powers. It is only subsequent to a courageous struggle for existence that he successfully evades death on two occasions at the hands of trains—first by the spectral locomotive and subsequently by the tangible one.

*“Phulboni was stunned: the chances of there being a train anywhere nearby were close to nil. [...] Phulboni was still falling when the lights of the train flashed across the flooded field. At that very moment he heard a scream, a raging, inhuman howl that howled the stormy night—Laakhan and then it was silenced by the thunder of the speeding train[...] But all the while, the only thing he could think of was how narrowly he escaped death. [...] He looked around and discovered that he was lying on the siding, across the tracks. And once again, Phulboni threw himself off the tracks. This time the train was too real.” (TCC 233-237)*

The narrative presents an intriguing array of inexplicable phenomena, including the lantern, the rail siding, the spectral station-master, the phantom train, and the enigmatic figure shrouded in darkness—elements reminiscent of a suspense thriller. He perceived a scream, a furious and monstrous cry that tore through the tempestuous night, and Laakhan was acutely aware of it. Phulboni's narratives intricately explore the potency of silence, aptly titled *The Laakhan Stories*. Within these mythical tales, a mysterious figure named Laakhan traverses various identities, transitioning from a postman to a village schoolmaster, among others. These perplexing anecdotes further substantiate the notion of soul transmission among individuals. exhibits the peculiar manifestation of enigmatic elements such as the lantern, rail siding, spectral stationmaster, phantom train, and the figure whose visage is shrouded in obscurity—reminiscent of a suspense thriller. He perceived a scream, a furious and monstrous cry that tore through the tempestuous night, and Laakhan was acutely aware of it.

These perplexing anecdotes further substantiate the notion of soul transmission among individuals. Ghosh meticulously explores the intricate religious rites of the clandestine sect concerning the process of soul transmigration. The narrative employs a form of fanciful realism, captivating the audience through its enchanting and ethereal components. Sonali, employed at a magazine in Calcutta, observes the same ritual taking place on Robinson Street, wherein the spirit of Laakhan is transposed into the corporeal form of Romen Haldar and experienced by Urmila working for the same newspaper.

*“Urmila stared at him, openmouthed. ‘But he’s meant to come to our flat for dinner tonight,’ she began to explain, meaninglessly. ‘That’s why I’m cooking this fish; that’s why I’m going to be late*

*for the press conference ...' She shook the bag of fish under his nose once again. The secretary sneered. 'You're either mad or dreaming,' he said. 'Mr Haldar is booked on a flight to Bombay this evening – he has to attend a meeting there. He had no plans to visit you or anyone else here.' With a gesture of dismissal, he turned to the chowkidar." (TCC 159)*

This entire procedure is conducted by Mangala Bibi, who assumes the guise of Mrs. Aratounian. The narrative in question challenges the overarching assertion that humanity's liberation is solely attainable through technological means while simultaneously providing an insight into the potential for alternative pathways to freedom.

The Calcutta Chromosome, as conceived through the lens of counterscience, is dismissed as nonsensical by advocates of conventional science, primarily due to Ghosh's use of mythical tales and magic realism that is contrary to the fact-based nonfiction. The principal theme of the novel revolves around silence, a concept that emerges from the frequently articulated notion that to articulate anything is to alter its essence. In this narrative, stillness signifies an elusive experience that transcends the confines of language and understanding. The narrative presents this riddle as a pervasive motif throughout its structure. Upon turning the final page, the reader finds themselves irresistibly drawn to further contemplation of the text. The author deliberately refrains from providing a definitive resolution to the central enigma of the novel, thereby inviting the reader to engage in a process of interpretation and personal understanding.

## **References**

1. Bowers, Maggie Ann. "Magical Realism." London and New York: Routledge, 2004. pp. 65.
2. Flores, Angel. "Magical Realism in Spanish American Fiction (1955)." Duke University Press eBooks, 1995, pp. 109–17.
3. Verzasconi, Ray. *Magical Realism' And The Literary World Of Miguel Angel Asturias*. California, University Microfilms, 1967
4. Ghosh, Amitav. *The Calcutta Chromosome: A Novel of Fevers, Delirium, and Discovery*. New Delhi, Penguin Publication, 1996.
5. Adhikari, Madhumalathi. "The Continuity of Life, Mission and Mystery in The Calcutta Chromosome." *The Novels of Amitav Ghosh*. Ed. R. K. Dhawan. New Delhi: Prestige, 1999. 228–234.
6. Banerjee, Joydeep. *The Novels of Amitav Ghosh: A Critical Study*. New Delhi: Sunrise Publications, 2009.
7. Chambers, Claire. "Postcolonial Science Fiction: Amitav Ghosh's *The Calcutta Chromosome*." *The Journal of Commonwealth Literature* 38.1 (2003).
8. Trikha, Pradeep. "The Calcutta Chromosome: A Literary Touchstone." *The Novels of Amitav Ghosh*, Ed. R. K. Dhawan. New Delhi: Prestige, 1999.
9. De, Shomik. *Magic Realism and Postcolonialism*. Volume 6, Issue 2, April 2018
10. Rudramani, M. H. "The Portrayal of Silence in Amitav Ghosh's *The Calcutta Chromosome*." *Journal of Comparative Literature and Aesthetics*, Oct. 2020, [jcla.in/wp-content/uploads/2020/10](http://jcla.in/wp-content/uploads/2020/10). Accessed 18 Oct. 2024.

**Abbreviation used** : TCC ( The Calcutta Chromosome)