

Networks of Stories:
Amitav Ghosh's *The Calcutta Chromosome*
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“[K]nowledge [can]’t begin without acknowledging the impossibility of knowledge.” (*Calcutta* 104)

Amitav Ghosh’s fourth novel, *The Calcutta Chromosome* (1996) is a complex, quasi-science fiction narrative set in the near future. It centres on the Egyptian-born Antar’s attempt to find out why his former colleague in a New York-based conglomerate, Murugan, disappeared while on leave in Calcutta. Using computer-mediated communication and holographs, Antar discovers that while researching the real-life scientist, Ronald Ross (1857-1932), Murugan had uncovered the workings of an Indian “counter-science” group. This cult was apparently the driving force behind Ross’s Nobel prize-winning discovery that malaria is transmitted by anopheles mosquitoes. The group comprises shape-shifting subaltern figures, including the scavenger woman Mangala and Ross’s favourite servant sometimes known as Laakhan. The group experiments with pigeon sacrifice and religious rituals in an ultimate quest to achieve immortality.

Beneath the novel’s multiple layers of narrative lies a debate about knowledge and power relations.¹ This paper’s epigraph, “knowledge [can]’t begin without acknowledging the impossibility of knowledge,” is taken from a pivotal, if paradoxical speech by Murugan, and wittily encapsulates one of Ghosh’s most compelling dilemmas as a writer. How can one challenge the totalizing impetus of the knowledge that has been imposed by the West on its former colonies, without reproducing its claims to universal applicability? Murugan’s identification of a knowledge that recognizes its own “impossibility” draws both on postmodernist thought² and on a strain of Hindu thought which indicates that recognizing that one does not know everything is the first step towards

knowledge. This philosophy is illustrated in the *Upanishads*, in which it is stated:

One thing, they say, is obtained from real knowledge; another, they say, from what is not knowledge. [...] He who knows at the same time both knowledge and not-knowledge, overcomes death through not-knowledge, and obtains immortality through knowledge. (qtd. in Sen 128)

This interesting quotation cannot but resonate for the reader of *The Calcutta Chromosome*, both in its creation of a space for the coexistence of conventional knowledge and its mysterious antithesis, “not-knowledge,” and in the connection it makes between knowledge and immortality. The implication given both by this passage from the *Upanishads* and Ghosh’s novel is that conventional knowledge is useful, but only when its limitations are recognized.

What are the types of knowledge that are interrogated in *The Calcutta Chromosome*? I contend that the computer-aided research of Ghosh’s protagonists, Antar and Murugan, reveals fissures in the claims of Western science to autonomy and universal applicability. Ghosh makes allusions to Indian, Egyptian, American, and British texts on subjects as varied as malariology and Gnosticism. In doing so, he challenges the artificial frontiers drawn up to separate academic disciplines and texts in a style that recalls the following statement by Michel Foucault:

[t]he frontiers of a book are never clear-cut: beyond the title, the first lines, and the last full stop, beyond its internal configuration and its autonomous form, it is caught up in a system of references to other books, other texts, other sentences: it is a node within a network. (23)

My way into this novel is to examine specific instances of its diverse use of intertextuality and to analyse the way in which Ghosh’s creation of an encompassing network of references impacts upon the novel’s debate about the indeterminacy of knowledge. Ghosh’s allusions to a wealth of stories from different cultural traditions represent, I suggest, an attempt to challenge the “claim to *know*” (*Calcutta* 103) of Western

scientists such as Ross. Ghosh countervails the rigidity of scientific discourse with complex layers of stories. I demonstrate that these tales unfurl to reveal little more than uncertainty and silence. Silence is therefore posited in the novel as a radical alternative to the vociferous assertions of knowledge.

My methodology is informed by Gérard Genette's rigorous definitions of different types of textual reference. Genette refines Kristeva's term intertextuality by proposing five types of textuality, the most important of which for my purposes is the term architextuality. He defines architextuality as "the entire set of general or transcendent categories—types of discourse, modes of enunciation, literary genres—from which emerges each singular text" (1). This definition of architextuality comes close to Kristeva's description of intertextuality as the interaction between a large body of texts (Culler 105). Genette distinguishes architextuality, the general influences of texts on other texts from what he designates "hypertextuality," which concerns a rewriting of a specific text. He writes, "[b]y hypertextuality I mean any relationship uniting a text B (which I shall call the *hypertext*) to an earlier text A (I shall, of course, call it the *hypotext*), upon which it is grafted in a manner that is not that of commentary" (5). Genette uses this term to suggest that hypertextuality is the transformation of a single text by another, through parody, pastiche, or imitation, as in Joyce's *Ulysses* (in its relationship to the *Odyssey*).

The Calcutta Chromosome is replete with both types of textuality. Hypertextuality is evident in Ghosh's negotiations with Ronald Ross's diaries and *Memoirs*. A more general architextuality is apparent in the novel's relationship with the genres of science fiction, cyberpunk, nineteenth-century ghost stories, and so on. In this article I examine architextuality rather than the hypertextuality I explored in my earlier paper on the novel (Chambers "Science Fiction"). I trace the novel's subtle allusions to other texts in one particular section, the Renupur station passage which until now has received relatively little attention from critics.³ I am, however, also concerned to examine more recent understandings of the term hypertext. Independently from Genette's work, the term has of course also been employed by those working in the field of Information Technology. In the 1960s, the computing expert Theodor H. Nelson

used the word “hypertext” to denote a sense of relationships between nodes of texts connected electronically, as, for example, the internet links texts with other texts, diagrams, and visual images in a non-hierarchical, unconsecutive fashion (Landow 3–4). It is significant that the literary theorist, Genette, and the IT specialist, Nelson, use the same terminology to describe both a type of intertextuality and a computer-mediated way of reading.

Going back to the statement from Foucault quoted above, I wish to draw attention to his choice of language when he describes a book as being “a node within a network,” meaning that it cannot be separated from its literary influences and historical context. It is interesting to note, as George P. Landow has done in his influential study *Hypertext*, that Foucault is not the only theorist to use this image of nodes and networks. Derrida, for instance, writes in a similar vein to Foucault on the interconnectedness of all written works: “a ‘text’ ... is henceforth no longer a finished corpus of writing, some content enclosed in a book or its margins, but a differential network, a fabric of traces referring endlessly to something other than itself, to other differential traces” (qtd. in Kamuf 257). Landow argues in *Hypertext* that the French philosophers’ and theorists’ predilection for imagery such as “*link (liaison), web (toile), network (réseau), and interwoven (s’y tissent)*” (8, italics in original) is indicative of a paradigm shift that has taken place in recent conceptual enquiry. Landow contends that this epistemological shift results from a widespread recognition of the need to abandon “conceptual systems founded upon ideas of center, margin, hierarchy, and linearity” and to replace them with models based on “multilinearity, nodes, links, and networks” (2). What Landow does not mention, but what is implicit in his choice of the words, “centre, margin, hierarchy, and linearity,” is that the disruption of these structures, and their replacement by a new emphasis on networks, may have an impact on the relationships between hegemonic and subaltern groups. It is the question of the extent that the new celebration of the network may be said to alter things for the subaltern that preoccupies Ghosh in *The Calcutta Chromosome*.

Landow argues that theorists of both literature and computing have independently arrived at the same conclusion that the network is the

most useful model for our experience of reading, writing, and processing data. Further dimensions are added to his argument by recognizing that the image of nodes and networks has also been used by several analysts to describe our increasingly globalized, information-based economy and society. Manuel Castells, for example, writes that “dominant functions and processes in the information age are increasingly organized around networks. Networks constitute the new social morphology of our societies” (469). He goes on to explain what he means by a network:

A network is a set of interconnected nodes. A node is the point at which a curve intersects itself. What a node is, concretely speaking, depends on the kind of concrete networks of which we speak. They are stock exchange markets, and their ancillary advanced services centers, in the network of global financial flows. [...] They are television systems, entertainment studios [...], news teams, and mobile devices [...] in the global network of the new media. (470)

The fact that Castells discusses our increasingly globalized society using the same metaphor of the network that Foucault and Derrida employ in talking about interconnected relationships between texts suggests that a connection may be made between literary strategies and Castells’ “network society.” I would argue that Ghosh’s *The Calcutta Chromosome* is, in Foucault’s terms, “caught up in a system of references to other books, other texts, other sentences” to an unusually great extent. Ghosh uses inter-, hyper-, and architextuality as part of a strategy to reflect upon the increasingly interconnected world that it describes: a world which, as Jonathan Friedman puts it, is “a web, in which adjustments made here are bound to have effects over there” (21). The wealth of references to be found in *The Calcutta Chromosome* makes the novel appear more overtly “a node within a network,” both in the sense of a network of literary relationships and in the broader sense of being part of a globalized world.

The novel’s structure also dramatizes the model of nodes and networks. Ghosh’s novel offers a globalized worldview in that it has no central location, and events occurring in Egypt, India, and the US at different historical moments are spliced together. The suggestion is being

made—not for the first time in Ghosh’s writing—that places and events which seem to bear no relation to each other are in fact linked. The use of the nodes within a network structure allows Ghosh to escape from the idea of a centre and periphery in his novel. This rejection of centres and peripheries is also reflected in another device in the novel: the use of stories that contain layers of mystery, but have no real revelation at the core, like an onion which has nothing in the centre.

I would now like to examine Ghosh’s experimentation with one such mysterious story in delineating a technologically advanced, network society. Earlier I suggested that networks are a conspicuous feature of the novel, with systems of global commerce and international communications a ubiquitous presence. Furthermore, I have also made clear that the novel itself is not autonomous, but forms part of a complex lattice of texts and genres which are evoked throughout the novel. I have already attempted to navigate some of the way through this labyrinth of references in my article on the novel (“Science Fiction”), looking, for instance, at Ghosh’s rewriting of science fiction and the history portrayed in the autobiographical *Memoirs* of Ronald Ross. I would now like to turn to a section of the novel, which I find particularly emblematic of Ghosh’s ambitious intertextual project. This is the passage in which the writer Phulboni has a strange experience at Renupur station (*Calcutta* 255–82). I choose this passage because it is a particularly good example of Genette’s “architextuality,” in that it is a tissue of references involving “a relationship that is completely silent” (Genette 4). It is the job of the critic to try to break the silence and make sense of the many references, both generic and specific, that are intended in the Phulboni narrative.

This complex story concerns the trip Phulboni makes as a young man to the remote village of Renupur, as part of a work assignment. When he reaches Renupur station, he is surprised to find it deserted except for a comic stationmaster. Because of monsoon flooding, Phulboni elects to spend the night in the signalroom, although he meets strong opposition from the stationmaster. Ignoring the stationmaster’s insistence that it is not safe, Phulboni makes himself comfortable in the signalroom. Almost immediately he observes some strange occurrences, which culminate in him being enticed onto the railway track by a bobbing red

lantern. He hears a few cries of “Laakhan,” one of the names adopted by a central member of the counter-science group. Phulboni then believes he almost gets run over by a train, only to wake up and be told by the stationmaster that the lantern has not been disturbed all night. He subsequently fully wakes up and finds himself on the railway track with a train coming. He manages to hurl himself out of the way just in time, and this time the train is “all too real” (*Calcutta* 279). The train grinds to a halt a mile away and its engineer tells him that the siding has not been used since its former stationmaster was killed after being lured in front of a train by Laakhan as a young boy.

Phulboni’s story is refracted through several discursive lenses. Not only are there many rumours and stories within the narrative itself, but also Phulboni’s account is conveyed by several different tellers. The journalist Urmila recounts to Murugan a story that Phulboni had reported many years ago to her friend’s mother, but her voice is quickly subsumed to one that appears to belong to an omniscient narrator,⁴ such that far greater detail is provided than would be probable in a spoken monologue. As such, the veracity of this story is highly debatable. This is made more so by the self-confessed doubt of Phulboni as to what happened, and the dreams he has at several points in the story which make everything still more uncertain. This kind of “tall tale,” which has layers of narrative structure but very little that is tangible at its centre, is clearly in the style of nineteenth-century and Edwardian ghost stories, as well as parodying Indian railway stories (Leer 57). I would like now to trace the allusions, both Western and Indian, which Ghosh intends to make in this section.

Perhaps the most obvious influence on this passage is Charles Dickens’s story “The Signalman,” which contains many similarities of plot and tone with Phulboni’s story. The story begins in a comparable way to Ghosh’s interpolated story by locating its eponymous signalman in a lonely, isolated signal-box (Dickens 2). The suggestion is made that madness may be responsible for the tale recounted, when the narrator speculates as to whether there might be “infection in [the] mind” of the teller (3). A similar possibility is never far away from explaining strange events in *The Calcutta Chromosome*, as malarial or syphilitic delirium is

a device to allow for the possibility that the supernatural depicted are not merely delusions. Like Phulboni's story, "The Signalman" is a tale that relies on hearsay, which complicates its relationship to truth. As Gary Day points out, it is "a twice-told tale; the story that is told to the narrator is the same one as he in his turn tells to his readers" (29). The most striking motif in both stories is also the same, a red lantern that lures people to their deaths. In Dickens's story, a red light held by a frantically waving phantom appears to the signalman several times, and in three instances it is the harbinger of disaster. The repeated image of a mysterious red light, conjoined with the signalman's eventual gruesome death by being cut down by a train, are the clearest indications we have that Ghosh's story is to be read in part as a re-writing of Dickens's tale.

Both stories also share a sense of ambiguity at the end as to whether baffling occurrences can be accounted for by coincidence, or whether supernatural forces are at work. In "The Signalman," the narrator gives a quasi-medical rationalization for the signalman's vision of a spectre holding the danger light:

Resisting the slow touch of a frozen finger tracing out my spine, I showed him how that this figure must be a deception of his sense of sight; and how that figures, originating in disease of the delicate nerves that minister to the functions of the eye, were known to have often troubled patients, some of whom had become conscious of the nature of their affliction, and had even proved it by experiments on themselves. (7)

Despite the chill that runs down the speaker's spine, this is an eminently sensible interpretation of the vision. Talk of proof, experiments, and patients is, however, immediately undercut by the signalman's revelation that shortly after the phantasm's appearance a major accident had taken place. The narrator promptly argues that "remarkable coincidence[s] did continually occur" (8), only to be puzzled once again by the signalman's account of the ghost's next emergence and the death of a woman on the train. In this way, the narrative moves between rational and supernatural explanations for bizarre events. Similarly, in Phulboni's story there are always two possible solutions to the mysterious events at Renupur, one

reasonable and one paranormal. When Phulboni's light goes out for no reason, he is struck by an unreasonable fear, which is described in much the same terms as Dickens's narrator uses: "Phulboni froze; a chill ran down his spine." He is reassured by the presence of his gun: "[t]here was nothing he knew of that was proof against a .303" (*Calcutta* 270), but this comforting thought inevitably points towards the idea of unknown beings that *are* immune to gunfire. Both texts leave it up to the reader to decide whether there is a rational or a supernatural explanation for incidents, and it seems likely that most readers' reactions will be hesitation and puzzlement. The existence in both stories of uncertainty as to whether the strange events narrated are uncanny or the product of a fevered mind shows that these events have the equivocal status that, according to Todorov, Jackson and others, is characteristic of the fantastic. The fantastic's ambivalent relationship to both scientific rationalism and religion or spiritualism is a useful form for a writer like Ghosh, who suggests that neither science nor religion can explain things fully. There is thus a silence at the heart of both narratives, a refusal on the narrators' part to explain "what really happened."

Two more intertexts for Phulboni's story are suggested by Ghosh himself, who names "*Khuditopashan*, a Tagore story called *Hungry Stone* [*sic*] [a]nd ... some stories by Paneshwarnath Renu" as having exerted "a very powerful influence" on the novel ("Naipaul" n. pag.). Paneshwarnath (also known as Phanishwar Nath) Renu was a Hindi writer whose stories and novels, written in the period 1946–73, are notable for their sensitive depiction of village life and socialist slant. It is impossible to be sure which of Renu's stories influenced Ghosh, although it seems likely that the mysterious Renupur station portrayed in Phulboni's narrative is intended as a reference to this writer.⁵ However, "Smells of a Primeval Night" has evident parallels, as it recounts the story of Karma, a young boy who moves from station to station doing menial work. In the story, Karma is working at an obscure station that recalls the isolation of Renupur in the Phulboni story (Renu 141), and descriptions of the monsoon-flooded landscape are similar to the waterlogged scenery portrayed in Ghosh's narrative. In Renu's narrative, as in the Phulboni narrative, several strange dreams are recounted, which

are described in such detail that the dreams and reality merge. In both tales, dreams are related without any explanation so that at first it is impossible to know that they are not actual events. This heightens the narratives' sense of strangeness and emphasizes the possibility that supernatural forces are at work. Here is the best example of a dream that blends with reality in Renu:

Karma couldn't free himself from the railway track. He writhed, he screamed, but his body wouldn't budge [...] The thundering engine raced over him, severing his neck and feet. His head dangled to one side of the track, his feet lay scattered on the other. He quickly gathered up his cut-off feet. Good lord, they had turned into Anthony Saheb's pair of rubbers! Gumboots! And what had happened to his head? Scram, beat it! The damned cur was gnawing his nose and ears. (136)

Only towards the end of this description do the events become absurd and evidently dream-like, when Karma's feet metamorphose into an Englishman's gumboots and he is woken by a stray dog. The subject matter of this passage also reflects Phulboni's story, in that Karma's dream prefigures a key trope of the Ghosh's story: the dream of being run over by a train. I would argue, therefore, that this story is a starting point for the Phulboni narrative.

Another more canonical story that Ghosh cites as having an influence on *The Calcutta Chromosome* is Rabindranath Tagore's "The Hunger of Stones," that Ghosh himself translated. On the surface, there are fewer parallels between "The Hunger of Stones" and Phulboni's story than can be made with Dickens's "The Signalman" and Renu's "Smells of a Primeval Night." The subject matter of Tagore's story is quite different from Phulboni's, as it tells the story of a tax-collector in the Raj era who takes up residence in a deserted palace in the Muslim princely state of Hyderabad. Through a mysterious process he is able to watch (though without seeing) invisible spirits of Persian courtiers and maidens who had lived in the palace centuries earlier.

As Ghosh suggests, the story may be read as "an elaborate metaphor of colonialism and [a] man looking for an identity" ("Naipaul" n. pag.).

Significantly, Meher Ali, the main character is a collector of cotton duties, a controversial British tax that drained India of one of its most lucrative natural resources.⁶ This and the tax collector's fondness for British clothes, such as sola-topees, "English shirts" and "tight Western pantaloons" mark him out as a Westernized representative of the colonial government, who has complete confidence in reason and materialism as ways of understanding the world. His confidence is shaken by apparitions from an earlier, Muslim India, whose nocturnal appearances make the tax-collector question whether his masters' way of ruling India is any less delusory than the supernatural world he inhabits at night. At the heart of the story, then, is a discussion about meaning and reality. This is indicated by the sense of pointlessness that increasingly seems to surround the tax collector's daily duties of calculating excise duties for cotton (Tagore 165). It is further reinforced by Dipesh Chakrabarty's penetrating chapter on Tagore in *Provincializing Europe* (149–79), in which he argues that through his writing, Tagore aimed to "pierce the veil of the real," (150) exposing the higher realities of Hindu metaphysics that are not visible through empirical sight alone.

As the main character of Tagore's story muses, the spirits from an older India paradoxically begin to seem to inhabit a more substantial world: "I began to imagine that it was here in this eerie, unreal, unholy place that reality lay, that everything else was a mirage" (158). Added to this, the frequent appearance at the palace of the madman, Meher Ali, with his repeated insistence that "it's a lie, all of it's a lie" (167), magnifies the confusion as to whose version of reality is to be believed. Superficially, the fact that Meher Ali himself had a narrow escape from the palace spirits suggests that his incantations are intended to warn others away from their grasp. However, in an email to the aforementioned Tagore scholar and historian, Dipesh Chakrabarty, Ghosh reveals his belief that this refrain is intended as a warning against the colonists' civilizing rhetoric: "this anguish [about colonialism] ... is actually ever-present, [as in the] example, ... of [the phrase] 'It's all a lie'" ("Correspondence" 162).

However, there is much ambiguity as to how we are to read this story, and here Tagore's story intersects with Phulboni's. As with Phulboni's

tale and Dickens's "The Signalman," this is a story within a story. The stranger's tale of the "hungry stones" is never completed, as it is abruptly interrupted by the arrival of a train. There are also explicit references within Tagore's text to incomplete narratives. At night the tax collector feels that he becomes "a character in a story conceived centuries ago but left unwritten and unrealized" (161). This suggests an important resemblance between Tagore's and Phulboni's stories: both refuse to spell out their meaning, emphasizing the impossibility of knowing events with any certainty and embracing a sort of silence. This is probably the most telling parallel between the two texts: the refutation of a perceived Western belief that all phenomena are eventually explicable through language.

Furthermore, both stories are closely connected with trains (Tagore's tale is narrated by a stranger to two cousins who are waiting for a delayed train). This brings me to the significance of the railway in Ghosh's novel. As well as the networks of international communications, and a complex intertextual web linking varied literary genres and texts, there is another important network in the novel: the railway network. Trains are an incessant feature of *The Calcutta Chromosome*: Mangala is found at Sealdah station (*Calcutta* 145) and later on it is explained that many of the counter-science assistants are found in the station: "if you wanted to find people who were pretty much on their own, down and out with nowhere to go, [the station] was the place to look" (*Calcutta* 243). New York migrants meet up at Penn Station; Murugan turns himself into the lunatic asylum at Sealdah station; and Mangala leaves a note at the end to say that she has taken a train from Sealdah to Renupur (*Calcutta* 303). Martin Leer has addressed this railway theme in his essay "Odologia Indica." He contends that in *The Calcutta Chromosome* "[r]ailway stations ... function as the sites where characters and stories appear from and disappear into; centres which connect parallel worlds, a kind of real-world Internet portals" (55). He fleetingly gestures towards the similarities between the novel's use of railways and the World Wide Web, but does not develop the point. I would suggest that Ghosh constructs in this novel several grids that intersect each other; the railway network that connects the India of Ronald Ross's day being overlaid (but not

replaced) by the new technologies of the internet and holographic communication. It seems likely that just as the nineteenth-century invention of the railway was deeply implicated in the colonial project (Leer 41 & 44; Headrick 180–91; Adas 221–36), so too these new tentacles of the internet are entangled in more subtle forms of hegemony and control. Just as migrants in New York such as Antar find their own ways of resisting the surveillance created by new technologies (*Calcutta* 4), so too the subalterns affected by the railways in the parts of the novel dealing with the Raj also turn the weapon of trains back on the colonial master. This is most graphically shown in the story when characters are murdered or almost killed by being lured onto the train tracks by Laakhan.

I have argued that in *The Calcutta Chromosome* several different networks overlap: networks of textual references, international computer-mediated communications, and railroads. These networks allow the novel to avoid structural models of linearity, as the network system depends for its existence on the linkage of far-flung nodes. However, also integral to the idea of a network or a web are holes, gaps, and intangibility. Thus, when I tried to analyze the elaborate story told by Phulboni, I found it to be a pinprick in a constellation of references; but in answer to the question “what happened to Phulboni?” all the story yields is silence and uncertainty. This is one of the most important conclusions to be drawn from this novel: the idea that nothing can ever really be known.

Throughout this paper I have explored many of the stories and genres to which *The Calcutta Chromosome* alludes. I now want to contrast the volubility of this archi- and hypertextuality with another of the novel’s key concerns, which, as I have indicated, is silence. The novel suggests that the act of putting anything into writing inevitably distorts the “truth” of the thing it seeks to describe. This is well illustrated when Murugan is explaining the logic of the counter-scientific cult:

Maybe this other team started with the idea that knowledge is self-contradictory; maybe they believed that to know something is to change it, therefore in knowing something, you’ve already changed what you think you know so you don’t really know it at all: you only know its history. Maybe they thought

that knowledge couldn't begin without acknowledging the impossibility of knowledge. (*Calcutta* 103–104)

Although writing and language are not specifically mentioned in this passage, it is implied that the “impossibility of knowledge” arises from the need for knowledge to be transmitted by language. Murugan indicates that language is insufficient to explain phenomena and inevitably changes the thing that it attempts to describe. He confirms this by arguing that the secret group “would in principle have to refuse all direct communication, straight off the bat, because to communicate, to put ideas into language, would be to establish a claim to *know*—which is the first thing that a counter-science would dispute” (*Calcutta* 103). Ghosh seems to be arguing that any claim to knowledge—whether it be historical, scientific, or aesthetic—is a construct, dependent on its cultural origins. This is not to say that the attempt to gain knowledge is a futile one, but that one must recognize the limitations of one's attempt from the outset. Thus Murugan arrives at the contradictory, yet insightful, realization that “knowledge couldn't begin without acknowledging the impossibility of knowledge.” In short, the novel centres around the postmodern realization that “the Enlightenment pursuit of ‘knowledge’ has imploded” (Nunes 173).

This recognition comes about because of an understanding of the limitations of language. The novel examines the idea that narratives, even such apparently factual ones as histories, are “not at all transparent either in terms of language or structure” (Hutcheon 105). Ghosh plays with the idea of unreliable evidence and the problems of fashioning history out of written documents. Antar rarely constructs his alternative histories out of straightforward texts, however. He has to interpret bizarre objects such as an identity bracelet, a bottle of correcting fluid, and even scraps of newspaper used to wrap up fish. Such instances continue the suggestion found in *In an Antique Land's* that all historical narratives seek to make sense of textual and non-textual traces, and to make a coherent story out of silences or fragments.⁷

Throughout his writing, Ghosh is preoccupied with the notion that language is not a neutral reflection of reality, but in fact irrevocably

shapes our view of reality.⁸ Perhaps for this reason the counter-scientific group rejects language, choosing to work instead with silence and indirect communication. Indeed, Murugan describes the group as “a crowd for whom silence is a religion” (*Calcutta* 218). Phulboni is desperate to understand this silence, and he often refers to a Goddess of Silence whom he begs to enlighten him:

As a tree spreads its branches ... to court an invisible source of light, so every word I have ever penned has been written for her. I have sought her in words, I have sought her in deeds, most of all I have sought her in the unspoken keeping of her faith [To her] I make this last appeal: “Do not forget me: I have served you as best I could.” (*Calcutta* 123)

This speech illustrates the paradox that writing can be a quest for the perfection and profundity of silence. Phulboni’s argument that “every word I have ever penned has been written for her” evokes thoughts that cannot be articulated in language. It is the job of literature to try to enunciate these unspeakable ideas in new ways. Silence, as George Steiner reminds us, is the ultimate, yet impossible aim of literature. Steiner argues that human discourse is at once restricted but simultaneously suggestive of that which transcends it (60). Michael Wood agrees that the transcendence of the word is “what literature longs for,” but emphasizes that this is an impracticable goal, not only because of literature’s dependence on language, but also “because a complicated fidelity to silence is one of literature’s most attractive attainments (1)” Phulboni recognizes this “complicated fidelity” between language and silence, indicating that the two are inextricable: “the Word is to this silence what the shadow is to the foreshadowed, what the veil is to the eyes, what the mind is to truth, what language is to life” (*Calcutta* 27). Here, the Word appears as a permanent obstruction to clear understanding. Phulboni intimates that language severely restricts our vision of life, filtering out images that it cannot interpret, like a veil covering the eyes.

Phulboni’s invocation to the Goddess of Silence has several effects. Firstly it evokes Valentinian cosmology, a worldview in which Silence

is deified as a Goddess and juxtaposed with a male God, represented by the Abyss (*Calcutta*, 214). The second-century thinker, Valentinus, reportedly came from Egypt and formulated a heterogeneous type of Gnosticism in which myths from both East and West were intertwined (Roukema 129–30). Gnosticism was a multifarious religious movement that existed in the first centuries AD and developed alongside the early form of what became accepted Christian doctrine. The movement incorporated such sects as the Manicheans⁹ and Mandaeans, as well as the Valentinians, but these schools of thought were all predicated on the *gnosis*, or secret knowledge, that the cosmos was essentially dualistic. Gnostics believed that the world was a flawed construction, created by the “demiurge,” a lowly creator God, but that man contained a “divine spark” of substance from a higher God. *Gnosis* or insight into the obscured relationship between man and God was said to precede redemption from the cycle of death and rebirth, enabling the initiated to find residence in the heavenly realm.

As such, the novel’s references to Gnostic and Valentinian thought provide illumination for several of the novel’s themes. The Gnostics’ veneration of Silence resonates with Ghosh’s argument about the need for literature to acknowledge the gaps and silences in its fabric. Furthermore, the Gnostics’ emphasis on a hidden knowledge which should be kept secret recalls the counter-science group’s need for silence and absolute discretion among its followers. The word *gnosis* itself indicates a dynamic process of knowing, rather than completed, unconditional knowledge. While the Gnostics saw their knowledge as total, divinely sanctioned wisdom, they also viewed it as “experience, a lived experience of spiritual regeneration” (Filoramo 39–41). This stress on the flux of knowledge once again aligns the Gnostics with the counter-scientific cult who, as we have seen, believe that knowledge is constantly mobile, changing as soon as it becomes known (*Calcutta* 103–104). The last reason why Gnosticism is relevant to Ghosh’s concerns is that this is a religion that has been written out of history, having been obscured as a religious movement by the distorting lens of Christianity. Throughout this novel and his entire *oeuvre*, Ghosh is interested in groups who have not had a voice in orthodox histories.¹⁰

Secondly, Phulboni's invocation of silence reminds the reader that many people do not have access to written language, and that for every book we read there are countless books that were never written, due to illiteracy, poverty, or social pressures (Olsen 6). This is reminiscent of the silence of Ronald Ross's real laboratory assistants (Chambers "Science Fiction"). Without education or financial independence, men such as the real-life Lutchman (fictionalized as Laakhan in the novel) who might have become talented scientists, are confined to the margins of history. A final perspective on the novel's exploration of silence is found in the notion that silence may be the only appropriate response to incidents of great trauma and suffering. Walter Benjamin and George Steiner write memorably on the inadequacy of words as a response to such cataclysmic events as World Wars I and II. The knowledge of the literary bent of many concentration camp workers has promoted disillusionment with verbalization among some post-war writers, most famously Samuel Beckett. As such, Ghosh's preoccupation with silence in this novel may be an ethical response to the economic and social gags of colonialism. Ghosh's creation of a space for silence in this novel may come as a reminder that we should not "speak for" the subaltern, but rather recognize, with Spivak, the unrepresentable aspects of the Other's experiences.

Ross's verbosity and eagerness to record everything for posterity is contrasted with the mysterious silence of the counter-scientific cult. The feverish determination of the former to make his name in the annals of Western science is satirically contrasted with the Indian group's more metaphysical goals. Laakhan's and Mangala's apocalyptic fusion of science with religion implies an almost complete refutation of Western rationality and the notion that man is the "measure of all things" (Hassan 6). Their secrecy and refusal to articulate their scientific findings suggests that language has become meaningless and redundant, and that it is no longer possible to "know" anything with certainty.

Ghosh's image of networks of stories interlaced with silence thus forms a powerful plea that knowledge be regarded as a dynamic process, rather than a fixed entity. It is not that Ghosh is opposed to knowledge, but that in this novel he indicates that all knowledges, whether con-

cerning science, history, or geography, are in fact provisional, they are stories still being told, still mutating. Ghosh seems to suggest that it is only when one recognizes that scientific practice or any claim to knowledge are in fact processes akin to story-telling, that one can actually set off on the evolving course of knowledge. To return to the epigraph, the phrase “the impossibility of knowledge” (*Calcutta* 104) indicates Ghosh’s other important point that full knowledge is not out there for the taking: there will always be silences and gaps in our narrations of knowledge. As a novelist, Ghosh foregrounds fiction as an important instrument of knowledge transmission, highlighting in particular the mode’s open-endedness and ability to encompass many different viewpoints. Although his fiction is always grounded in extensive factual research, as in the case of the representations of Ronald Ross, he always returns to the novel as the most apposite literary mode for imparting his non-hegemonic “not-knowledge.”

Notes

- 1 I would like to thank the anonymous reviewer whose helpful suggestions enabled me to extricate this paper’s central topic of the indeterminacy of knowledge from extraneous details.
- 2 In much postmodernist thought relativism, pluralism, fragmentation, and uncertainty have been invested with a paradoxical authority that leads to Hutcheon’s wry observation, “ye shall know that truth is not what it seems and *that* truth shall set you free” (13).
- 3 Khair is concerned with subaltern agency in *The Calcutta Chromosome*, but does not pay much attention to the Renupur passage. Thieme concentrates on the novel’s challenge to artificial “shadow lines,” tracing its allusions to Manichean philosophies and relating this to postcolonial theorists’ arguments that colonial discourse characterizes “East” and “West” in terms of Manichean binaries. Leer provides an interesting account of the novel’s use of trains and the railway in his paper. In Mathur’s dense and wide-ranging essay, she reads Ghosh’s novel alongside two other works that may loosely be categorized “South-Asian science fiction”: Rokeya Sakhawat Hossain’s short story “Sultana’s Dream” and Manjula Padmanabhan’s play *Harvest*. The article is timely in that it takes a feminist approach to Ghosh’s discussion of science, an approach that has often been neglected within Ghosh criticism, but once again there is no mention of the narrative about Phulboni. Romanik once again focuses on the novel’s representations of science, arguing that Ghosh’s representation of Calcutta squares with his broader

challenge to Eurocentric accounts of the history of science. The only critic to analyze the interpolated short story based in Renupur is Bishnupriya Ghosh, in her theoretically-astute article on the novel. However, Bishnupriya Ghosh takes a different approach to my emphasis on the inconclusive nature of knowledge, discussing instead the novel's allusions to ghosts and haunting, with reference to Marx and Derrida, Chakrabarty, and Amitav Ghosh's own essays. She also explores the important issue of vernacular fictions, which I also touch upon in this article, but I should note that I only became aware of her essay once the writing of this was almost completed.

- 4 At the end of chapter 37, Urmila begins her story about "something that happened to Phulboni many years ago," but after the chapter break there are no more speech marks, and the story progresses in a leisurely way, with descriptions of the monsoon flooding in a level of detail that is unlikely in a spoken conversation. This is a common technique of Ghosh's which we see at several moments in this novel. Another good example comes when Ava reconstructs Murugan's email about Elijah Farley's experiences in Calcutta: once again, Ava's voice slides into that of a third-person narrator.
- 5 The only works by Renu that I have been able to locate in English are a novel called *Maila Anchal (Soiled Border)* and a collection of short stories, *The Third Vow and Other Stories*. I examine a story in the latter collection called "Smells of a Primeval Night," which has clear similarities of theme and tone with the Phulboni story, but there may be other Renu stories that have relevance; the matter remains open for Hindi-speaking scholars to investigate.
- 6 The British ravaged India's formerly thriving weaving and handicrafts industries through an exploitative system of tariffs which prevented the exportation of Indian textiles. Simultaneously, Britain exercised its colonial sovereignty by appropriating India's cotton plants for use in the production of Lancashire textiles, which were then exported back to India at inflated prices (Chatterji; Baber 112–20). The narrator of Ghosh's *The Circle of Reason* angrily describes the British tactics as "a garotte to make every continent safe for the cloth of Lancashire, strangling the very weavers and techniques they had crossed oceans to discover" (*Circle* 57).
- 7 Ghosh highlights this connection in a recent interview in which he states, "I think the main influence on this book was *In an Antique Land*." He goes on to argue that the beginning of the novel is meant almost as a parody of his previous work: 'you remember *Calcutta Chromosome* begins with a guy finding in cyberspace a tiny clue, and then he goes off chasing it. So in some ways it's also a kind of private joke on myself' ("Naipaul" n. pag.). It is important not to lose sight of the fact that Murugan's research is being lampooned here. All researchers slant their research towards their own biases and interests, and Murugan is an extreme example of this, intended as a caricature of the kind of obsession demonstrated by the narrator of *In an Antique Land*.

- 8 For example, in an interview Ghosh argues that in the English language the word “colonialism” has no connotations of apartheid or racial oppression, but that these implications are present in all Hindi or Bengali discussions on the subject. He also claims that “a language is not just a discourse, it also contains within itself certain political perceptions, certain metaphysical perceptions” (“Transformed” n. pag.). As Postman writes, “we do not see nature or intelligence or human motivation or ideology as ‘it’ is, but only as our languages are” (15).
- 9 Thieme provides a comprehensive account of Manichaeism, both as a religion and a powerful metaphor in postcolonial studies (see also Janmohamed).
- 10 The references to Gnosticism thus fit with his attempt to recover the scattered or destroyed textual remnants of such groups as colonized peoples (throughout his work), dissident religious groups (such as the Vachanakaras who reformed Hinduism, as represented in *In an Antique Land*) or practitioners of pseudoscience (Chambers “Historicizing”).

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