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Other tomorrows: postcoloniality, science fiction and India

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OTHER TOMORROWS: POSTCOLONIALITY, SCIENCE FICTION AND INDIA

A Dissertation

Submitted to the Graduate Faculty of the
Louisiana State University and
Agricultural and Mechanical College
In partial fulfillment of the
Requirements for the degree of
Doctor of Philosophy

In

The Department of English

By

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CONTENTS

ACKNOWLEDGEMENTS.....	iii
ABSTRACT.....	vi
INTRODUCTION	
SCIENCE FICTION, POSTCOLONIAL STUDIES AND INDIA.....	1
CHAPTER I	
INDIAN SCIENCE FICTION: A HISTORICAL AND CRITICAL PERSPECTIVE.....	25
CHAPTER II	
MAPPING TOMORROWS: FUTURISTIC DISCOURSES IN ANGLOPHONE INDIAN SCIENCE FICTION.....	60
Silent Subversion: Counter-Science and Subaltern Discourse in <i>The Calcutta Chromosome</i>	60
Alternative Dystopia: Science, Power and Fundamentalism in <i>Signal Red</i>	79
<i>The Last Jet-Engine Laugh</i> : Disillusionment and the Postcolonial Nation.....	98
Future beyond the Nation-State: Strategies of Postnationalist Indian Science Fiction in <i>Generation 14</i>	116
Native Aliens: the Politics of Reconciliation in <i>Of Love and Other Monsters and Distances</i>	134
CHAPTER III	
AUTHORING SOMEONE ELSE’S FUTURUE: DEPICTIONS OF INDIA IN ANGLO- AMERICAN SCIENCE FICTION.....	155
Reworking of Hinduism in <i>Lord of Light</i>	160
<i>Shiva 3000</i> and the India Eternal.....	167
Cybernetic Divinities and a Split India in <i>River of Gods</i> and <i>Cyberabad Days</i>	177
India and the Bomb: Doomsday Scenario of the Twenty-First Century in <i>Dragon Fire</i>	190
CONCLUSION	
POSTCOLONIALITY, SCIENCE FICTION AND INDIA	200
WORKS CONSULTED.....	212
APPENDIX: PERMISSIONS.....	226
VITA.....	228

ABSTRACT

In this dissertation I argue that science fiction as a genre intervenes in the history-oriented discourse of postcolonial Anglophone Indian literature and refocuses attention on the nation's future—its position in global politics, its shifting religious and social values, its rapid industrialization, the clash between orthodoxy and modernity, and ultimately the dream of a multicultural nation. Anglophone Indian science fiction also indicates India's movement away from a nation trying to negotiate the stigma of colonialism to a nation emerging as a new world power. Thus, this genre reconstructs the Indian identity not only in the domestic sphere, but also in a global context. Reading these works (e.g. by Amitav Ghosh, Ruchir Joshi, Vandana Singh etc.) alongside postcolonial and science fiction theory, I also explore how these texts theorize the intersection of Western and Indian traditions, as well as indigenism and hybridity. I argue science fiction as a genre enables a synthesis of these clashing tendencies in a new way, which projects Indian futures marked by cultural hybridity and, often, exhibits critical and premonitory qualities. Together with the Indian works I also read a number of Anglo-American science fictions about India (e.g. works by Roger Zelazny and Ian McDonald among others) to examine Western ideas about Indian future and how they differ from the Indian texts. Although some of these works try to understand the complex socio-cultural dynamics of India while writing its future, most of the time they impose the Western stereotypes of the Orient. Because of this still persisting Orientalist attitude, I conclude that Anglophone Indian science fiction is the genre that can best project the Indian future in an authentic manner. It can synthesize both Indian and Western cultural influences in a futuristic scenario, while eschewing the bias that Western science fictions exhibit towards India; and at the same time this genre can break free of the historical burden characterizing such reclamatory effort in realistic postcolonial discourse.

INTRODUCTION

SCIENCE FICTION, POSTCOLONIAL STUDIES AND INDIA

Although Indian writing in English has always been an important part of postcolonial literary discourse, India's emergence as a legitimate world power over the last thirty or so years has seen a surging interest about the genre in the Anglophone world. Extensive studies have been done on Indian fiction in English. However, the focus of these studies has mostly been fixed on realistic or mimetic fictions and their social, political and cultural implications, or stylistic aspects of the texts (especially in case of magic realist works).¹ One strand of literature which has been neglected by scholars from deserved scrutiny is science fiction. It is a genre which has not been addressed by the experts working in various indigenous languages and literatures as well. Except for the Indian Science Fiction Writers Association, it has not raised much interest in Indian academic circles.

Such lack of attention though is not only exclusive to Indian science fiction; it is true of postcolonial science fiction all over the world, despite the genre's futuristic and subversive potentials. In science fiction studies too postcolonial science fiction has become visible only recently with the publication of the first ever anthology of postcolonial science fiction and fantasy, *So Long Been Dreaming* (2004), and the scholarly works of Patricia Kerslake, *Science Fiction and Empire* (2007), and John Rieder, *Colonialism and the Emergence of Science Fiction* (2008). However, there are still yawning gaps to be filled. Although *So Long Been Dreaming* presents stories written by

¹ The products of such extensive studies can be seen in Arvind Mehrotra's *A History of Indian Literature in English* (2003), Salman Rushdie's *Vintage Book of Indian Writing* (1997), Amit Chaudhuri's *Picador Book of Modern Indian Literature* (2002), Anindyo Roy's *Civility and Empire: Literature and Culture in British India, 1822-1922* (2005) and Basavraj Naikar's *Indian English Literature* (7 vols. 2002-2008) alongside many other specific studies done by scholars like M.K. Naik, Amar Nath Prasad, O.P. Mathur, Gajendra Kumar, Priya Joshi and more recently Anna Guttman (2007), P.K. Nayar (2008) and Priyamvada Gopal (2009) on Indian English fiction. A comparative analysis of Anglophone writing on India can be found in Margery Sabin's *Dissenters and Mavericks: Writings about India in English 1765-2000* (2002).

“postcolonial” writers (including Indian authors), a large section of the texts comes from the USA and Canada (written by Native Americans and African Americans) rather than from African and Asian countries. In the area of criticism, Kerslake’s work mainly examines texts written by the colonizers—white Europeans—not by colonized people. The same can be said of Rieder’s book. Only Ralph Pordzik’s *The Quest for Postcolonial Utopia* (2001) addresses utopian texts, including science fiction, written by postcolonial authors. But, this book is concerned more with utopian literature than with the conventions of science fiction. Still these texts begin to address issues that needed attention for a long time. The necessity for in-depth scholarship on works actually produced by postcolonial writers however cannot be emphasized enough. This is especially true for Anglophone Indian science fiction, which has been consistently engaging in ideological resistance to social and political hegemony over the last twenty years. The fact that no significant research has been done on Anglophone Indian science fiction till date is very surprising. My dissertation, “Other Tomorrows,” being the first extensive study of the genre, seeks to fill that gap.

I claim that science fiction as a genre intervenes in the predominantly history-oriented and presentist discourse of postcolonial Indian literature and refocuses the attention on the nation’s future—its position in global politics, its shifting religious and social values, its rapid industrialization and ultimately its dream of a multicultural nation. I argue that the generic devices of science fiction make it possible to focus on this national future: through manipulation of spatio-temporal constraints, creation of alternative worlds and defamiliarization. I also claim that the main impetus of this reframing arises from a shift in the nation’s status indicating India’s movement away from a country trying to negotiate the stigma of colonialism to a country emerging as a new world-power. This shift performs important work in reframing Indian identity in the context of global industrialization and modernization. My dissertation is all the more crucial because, like the Western discourse on Indian

history, Western discourses on India's future is already starting to codify it in a formulaic manner. Anglophone Indian science fiction can challenge such codification on the international stage and create visions of other tomorrows.

Western science fiction has started taking an interest in the discourse on future India because of India's rising importance in the international scene. However, in contrast to the Indian futures projected by the native authors, Western writers display a tendency to revert to the Orientalist stereotypes, and, thus, provide a biased image. In *Orientalism* (1978) Edward Said says that the Occident has a tendency of homogenizing the Orient in a formulaic manner. He also points out, most notably in *Culture and Imperialism* (1993), that the Western culture industry works as an ideological apparatus in the hands of the imperial powers that reinforces cultural stereotypes of the Other, the non-Westerner, in the minds of the people in the West as well as tries to impress the inferiority of the non-Westerner in his or her own mind. Although the Western science fictions do not completely follow this Saidian formulation, they often display an affinity to it. By analyzing some of these Western texts alongside the works written by Indian authors, I indicate the nature of this "futuristic Orientalism" in the Indian context and, thus, point out the need for countering such discourse. Hence, I further draw attention to the importance of Anglophone Indian science fiction in cultivating a proper futuristic postcolonial dialogue.

This futuristic postcolonial discourse is facilitated by a couple of counteracting cultural forces in Anglophone Indian science fiction. These works not only straddle the intersection of postcolonial and science fiction studies, they also theorize the interaction of Western and Indian traditions and negotiate the balance between indigenism and hybridity. As the social dynamics of postcolonial India have been irrevocably changed by Western influences, the future can be imagined only through a

medium that can synthesize Western and Indian cultural values. Science fiction provides an important site for imagining this national future precisely because of its freedom from a variety of generic constraints associated with realistic literature. In other words, these science fiction texts are responses to the hybridization of Indian culture through the mixing of Indian and Western influences and speculating what the future society will look like; these are also results of fast modernization of the country through rapid techno-scientific development; and finally they use the English language to present this new national identity to a wider international audience. To put it differently, “Other Tomorrows” historicizes Indian science fiction within the context of postcolonial literature while also exploring how science fiction transforms and intervenes in postcolonial discourses.

Indian science fiction is as much a product of traditional Indian imaginative literature as of Western scientific ideas. In other words, the genre is influenced simultaneously by the “cognitive” mode of Euro-American science fiction as well as by the ancient precritical traditions of myths and legends of the country such as fantasy, ghost stories, folk tales, fairy tales and mythological narratives. Science fiction in India, especially in the postcolonial era (after 1947, when most of the works in English were written), is a creation of a society at once driven by a fast growing materialistic industrial economy as well as the metaphysical and pastoral traditions that has existed for millennia. These works subtly challenge the normativity of Occidental literary forms and ideas, yet never fully reject the main science fictional generic tendency, which Darko Suvin describes as “cognitive estrangement.” Conversely, a number of Indian science fiction texts are influenced by the claim of Vedic science and an ancient pure Indian tradition.² This indigenist tradition posits India as the originator of all scientific thinking in the world and consequently rejects anything “contaminated” by hybridity. This trend is

²Such works as Lakshman Londhe and Chintamani Deshmukh’s *Samvabami Yuge Yuge*, Dattaprasad Dabholkar’s *Vijnanesvari* and J. V. Narlikar’s “Yaksophar” can be considered as science fictions influenced by such indigenist discourse.

mostly marked by a discourse of Hindu elitism that constructs its identity through the opposition to the non-Hindu Other. However, most Anglophone Indian science fictions challenge such claims of pure tradition. Thus, these texts create a space at the “interstices” of traditions characterized by difference and hybridity, and exploit their generic devices to create a futuristic postcolonial discourse.

An inherent affinity exists between the fields of science fiction studies and postcolonial studies. Although science fiction grew primarily out of the industrialized nations of the West, it exhibits a dialectical approach towards the tendencies of authority and subversion. This genre submits to the logics of rationality, yet radically undermines the notions of reality through its estranging devices, which makes this genre a device of potent subversion. Postcolonial studies too employ various strategies to challenge the ideological yoke of colonial and imperial domination. Since Anglophone Indian science fiction exists at the cusp of these two areas, this dissertation calls for a brief exposition of the salient features of both these fields.

Science fiction is probably one of the most difficult genres to define. In *Trillion Year Spree* (1986) Brian Aldiss defines science fiction as a literature coming out of the Gothic mode and concerned with man, his knowledge and his place in the universe.³ Aldiss is obviously indicating Mary Shelley’s *Frankenstein* (1818) as the starting point for science fiction—thus Gothic as the origin. However, the Gothic elements in *Frankenstein* are only one type of element that emphasizes the inscrutability of the human mind and adds a subversive quality to the novel. This subversiveness and inscrutability can be witnessed in other texts of fantastic nature. John W. Campbell’s definition

³ His exact words are, “Science fiction is the search for a definition of mankind and his status in the universe which will stand in our advanced but confused state of knowledge (science), and is characteristically cast in the Gothic or post-Gothic mode” (25). In discussing the imaginative nature of science fiction and fantasy he quotes Miriam Allen deFord’s formulation, “Science fiction deals with improbable possibilities, fantasy with plausible impossibilities” (26).

conversely places more emphasis on the assumptions and logical developments of the storyline.⁴ In fact he specifically differentiates between fantasy and science fiction based on the logical progress of their narratives. Ursula K. Le Guin in her introduction to *The Norton Book of Science Fiction* (1993) as well as in her introduction to *The Left Hand of Darkness* (1968) basically reiterates the Aristotelian maxims when she states that science fiction is a mode of lying in order to tell the truth; she places emphasis on the element of thought experiment that gives the genre an unique ability to explore the human condition in its myriad manifestations. Samuel Delany, Darko Suvin and Tom Shippey approach the genre as a literary product. Shippey looks at it as a literature produced in urban societies as an effect of technological development, while Delany sees science fiction as a product of a specific style of writing. In his famous essay “About, 5750 Words” (1971) Delany calls this style science fictional “subjunctive,” or mood, that at once marks a story, which according to him, is a series of words, as an example of something that “has not happened.” Much like Delany, Suvin defines science fiction as a specific mode of literary practice characterized by the interaction of “cognition” and “estrangement” and creating a “novum” or something new and distinguished from the author’s daily reality.

Out of all these, Suvin’s approach seems to be the most helpful in analyzing Anglophone Indian science fiction (and postcolonial science fiction in general), because he maintains a fine balance between synchronic and diachronic aspects of his analysis and also because he considers both style and content of the genre. In *Metamorphoses of Science Fiction* (1978), Suvin creates a historical genealogy of science fiction stretching back to Plato and Lucian to trace the development of the qualities that

⁴ Campbell writes in his "Introduction" to *Analog 6* (1966),

The major distinction between fantasy and science fiction is, simply, that science fiction uses one, or a very, very few new postulates, and develops the rigidly consistent logical consequences of these limited postulates. Fantasy makes its rules as it goes along [. . .]. The basic nature of fantasy is "The only rule is, make up a new rule any time you need one!" The basic rule of science fiction is "Set up a basic proposition—then develop its consistent, logical consequences". (xv)

distinguishes the genre, as well as analyses the stylistic qualities that renders the present texts as science fiction. The most important aspect of Suvin's formulation however is a critical and dialectic interaction of two opposing forces. He defines science fiction in the "Preface":

It [science fiction] should be defined as a fictional tale determined by the hegemonic literary device of a *locus* and/or *dramatis personae* that (1) are *radically or at least significantly different from empirical times, places, and characters* of "mimetic" or "naturalist" fiction, but (2) are nonetheless—to the extent that SF differs from other "fantastic" genres, that is, ensembles of fictional tales without empirical validation—simultaneously perceived as *not impossible* within the cognitive (cosmological and anthropological) norms of the author's epoch. (viii)

He goes on to say in chapter one: "SF is, then, a literary genre whose necessary and sufficient conditions are the presence and interaction of estrangement and cognition, and whose main formal device is an imaginative framework alternative to the author's empirical environment" (7). Suvin further highlights this dialectical tendency when he points out science fiction as "a developed oxymoron, a realistic irreality, humanized nonhumans, this-worldly Other Worlds, and so forth. Which means that it is—potentially—the space of a potent *estrangement*, validated by the pathos and the prestige of the basic cognitive norms of our times" (viii). Suvin treats "science" not in its limiting sense in the English language, but rather in a much broader sense, much like the Russian (*nauka*), French (*science*) or German (*wissenschaft*) corresponding concepts, which include not only the natural sciences but also the social sciences and even any type of methodical and logical scholarship. For Suvin, science in itself is not the most important object in a science fiction. According to him the "hypothesis" from where science fiction takes off is not a scientific but a fictional one; it is the estranging device, much like the "alienation effect" (*verfremdungs-effekt*) in Brecht's epic theatre or the Russian Formalist concept propagated by Victor Shklovsky—to defamiliarize (*ostranienie*) an object in order to draw attention to it. From that point onwards the story is developed with a totalizing rigor, which is the "scientific" element. This estrangement acting as a formal framework allows the

detached eye to focus on the tale's cognitive aspect—where the critical gaze is always fixed on the fundamental realities lying underneath the estranged surface. Thus, as Suvin says, science fiction “shares with the dominant literature of our civilization a mature approach analogous to that of modern science and philosophy, as well as the omnitemporal horizons of such an approach” (20-21). He also states that unlike the other forms of “estranged fictions” (fantasy, folk tales, myths etc.) science fiction does not exist outside time, but in all times and all spaces.

In *Critical Theory and Science Fiction* (2000) Carl Freedman problematizes Suvin's concept of “cognitive estrangement.” He points out the fact that adhering strictly to the meaning of “cognition” and “estrangement” would exclude much of the works in the popular pulp science fiction tradition while including many others which show less affinity with the traditional science fiction. “Cognition” used in the context of Suvin's definition of science fiction connotes the logical/reasoned thinking capacity related to acquiring of knowledge (science in its broader sense); by extension, this concept indicates the proper logical development within a text that leads to the knowledge of some type of human condition: political, philosophical, scientific and so on and so forth. “Estrangement,” used in the same definitional context would suggest the creation of unfamiliarity or a distance produced due to the lack of knowledge. This hints at the mysteriousness of the process of distancing of the fictional scenario from our normal world. In his definition, Suvin takes the mystery out of the estrangement and suggests that it is a result of the cognitive process desiring to explore human condition. Freedman argues that according to Suvin much of the early twentieth century science fiction in the USA—the Gernsbackian pulps—would be considered as not literature of “cognitive estrangement” for lacking the rigorous development of the plot. Rather they would be akin to fantasies wearing the mask of science fiction. Freedman is quick to indicate that even modern classics like George Lukas's *Star Wars* (1977 onwards) movies will fall into this category while Brecht and Dante would be considered proper

science fiction. He argues that though the ancestry of the great writers of modern day science fiction can properly be traced back to the great masters of “cognitive estrangement” of the past, modern science fiction in its present form would not have existed without the pulp writers of the Gernsback era. To solve this dilemma of ancestry Freedman modifies the term “cognition” as “cognition effect” to include texts that present an appearance of cognitive approach though without strictly being cognitive; thus, he defines science fiction as the genre that posits “cognitive estrangement” as its central tendency, but not as the only one.

Nevertheless, Suvin’s definition (as well as Freedman’s modified version of it) not only differentiates science fiction from the other, mainly “mimetic” or realistic, forms of literature, but also points towards the fundamental clash between “cognition” (the logical systematizing tendency) and “estrangement” (the fantastic element that subverts the logical and factual world). Yet, in science fiction, as both Suvin and Freedman agree, this estrangement is not wholly fantastic; rather, this estrangement is the result of a cognitive process. In spite of its cognitive origin, though, the estranging device acts as an agent of disorientation and defamiliarization to the reader. It is ultimately the device that puts the science fiction text outside of everyday logic and system, and undercuts all the values associated with the realistic language. Thus, science fiction is a genre that operates at the center of two opposing forces and functions through a dialectic process to bring forth the meaning of the text.

I find Freedman’s version of the Suvinian definition of science fiction most helpful for the analysis of the topic at hand. Nonetheless, I further emphasize the dialectic tendency that exists within science fiction genre as a whole. This tendency is most prominent in its approach towards the issues of authority and subversion. For the purpose of my discussion on Indian science fiction, which arose under the influence of and often as a reaction to British colonialism, identifying this dialectical

tendency is very important. The genre's development in the metropolitan centers of the West confers on it the legacy of imperialist authoritarianism, and its gestation in the field of scientific and technological writing as well as theoretical utopian thinking molded science fiction as an authoritative and, for a long period of time, male bastion. On the one hand, Science fiction's transition into its present form during the modernist era sowed the seeds of logical formation and structural conformism in the genre. Evidently, this was facilitated by the spirit of the time marked by a desire for cognitive structures, which was legitimized by the Enlightenment rationalism and its grand metanarratives that codified every cultural phenomenon under some universal scheme of things. On the other hand, another alternative source of the genre, the gothic fiction of the early nineteenth century, which dealt with the subversive, the macabre and the unconscious, undercuts the surface cognitivity of the genre with a propensity towards the strange and the fantastic. The co-existence of these two opposing tendencies distinguishes science fiction as a genre. However, other supplemental forces such as colonial expansion and political revolutions help promote this contradiction.

John Rieder rightly emphasizes the importance of colonialism on the development of science fiction in the 19th century Europe and America. He argues that science fiction arose both as a part of the drive to explore the white spaces on the map (in case of their absence, other planets), or to exoticize the Other in order to justify colonial rule, in other words, to assert white European supremacy. These two inclinations are evident in the dialectical approach that the genre exhibits towards the concepts of authority and subversion. At one extreme, science fiction creates programmatic universes that are dominated by scientific logicity; at another, it undermines all such hegemony by positing devices of "estrangement" that displace the fictional universe from our empirical milieu. However, since the post-structural "rupture," and the postmodern fragmentation of the overarching metanarratives in the 1960s, the dissident qualities of the genre have taken precedence

over its conformist tendencies. Feminist critic Sarah Lefanu claims that as a genre science fiction is not a “literature of authority” (87). It utilizes the fantastic mode and modernist techniques to thwart the hegemony of mainstream mimetic fiction as well as to question, to comment on, and to satirize the real social and political status quo. Yet, the dialectic of the propensities toward authority and subversion forms the core of science fiction even in its most radical manifestations. I consider this dialectical nature to be one of the salient features that distinguish science fiction from other forms of literature, and especially important for the subject that we are dealing with.

In science fiction the authoritative tendency emerges in different manifestations—in the totalizing vision of the programmatic societies (both dystopic and utopic), misogyny, and in marginalization of the racial, political and social Other. This propensity is most blatant in the early twentieth century American pulp tradition of Hugo Gernsback and Edgar Rice Burroughs. These pulps project an infantile macho “male” world with fragile fainting women and a xenophobic vision of the Other—the monstrous alien. This trait, which persisted well into the 1950s and ‘60s, led feminist critics and writers like Joanna Russ, Sarah Lefanu and Ursula K. Le Guin to characterize the texts from this era as marked by an authority of men over women. Joanna Russ contends that there are no “women” in science fiction before the 1970s. There are only images of women as seen through the eyes of men. Though later feminist scholars such as Justine Larbalestier and Robin Roberts discredit the totality or uniformity of this male dominance by creating an alternative feminist history of science fiction, they do not contest the fact that the authors were overwhelmingly white. Again, science fiction’s development within an accumulative capitalist and imperialist society marks it with the drives to explore, to know and to categorize the unknown. Both the adventure narrative tradition as well as the utopian trend is obsessed with these concerns. The faith in the Enlightenment rationalism and a sense of European superiority prompts the writers to colonize and control unexplored spaces and to

eliminate the “aliens.” They seek to order the chaotic universe because that is what human cognition demands; at least that is what Western rationalism demands. This rationalist and supremacist point of view, however, is not limited to the texts produced in the capitalist West alone. It is as much present in the texts produced in the Communist countries of East Europe, especially in Russia (and the former USSR), but in a different form. In works of Constantine Tsiolkovskii, Alexei Tolstoi, Ivan Efremov and Alexander Kazantsev the belief in a rational society created through socialism is very prominent. These societies however differ markedly from the Western capitalist mold.⁵ Much of Arkady and Boris Strugatskii’s works also are criticisms of capitalism, which they see as not truly rational.

Nevertheless, the nonconformist undercurrent of the genre always lurks beneath the surface. From Shelley’s *Frankenstein* onwards this undercurrent has been challenging the project of Enlightenment rationalism. At different moments this tendency has defied the logics of totalization (Evgeny Zamyatin’s 1921 novel *We* is a prime example) in different forms of anti-totalitarian narratives, especially in the form of feminist science fictions, postcolonial science fictions and science fiction horror. As a genre using estrangement as its fundamental component, science fiction is bound to be subversive. It draws conceptual resources from progress of science and philosophy that can challenge stereotypes and systems by literalizing metaphors and constructing scenarios alternative to empirical reality and conducive to subversive thought experiments, which would not be possible in mainstream mimetic literature. The dialectic between these two tendencies can be traced in the construction of the schematic utopias (both negative and positive) as well as in the texts that deal with postmodern fragmentation and difference.

⁵ Probably the best example of socialist science fiction is Efremov’s *Andromeda Nebula* (1956), which depicts a far future space age Earth that has attained the highest form of socialist system and functions on pure rationalism.

In science fiction following the post-structuralist dissolution of the modernist metanarratives this interaction manifests in several different ways: feminist science fiction, postcolonial science fiction, cyberpunk and other postmodern science fiction texts. The feminist science fictions of the West, which features most prominently in this epistemic shift, resist gender oppression on all levels of society. Sarah Lefanu and Brian Attebery deem science fiction specially suited for this purpose—to deconstruct the cultural and gender stereotypes by using its imaginative framework and estranging capabilities.⁶ Feminist science fiction uses the ambiguous and hybrid tropes like androgyny, cyborg and alien sexuality to subvert the exclusionary and homogenizing tendency of the patriarchal tradition. In texts such as Le Guin’s *Left Hand of Darkness* (1969) and *The Dispossessed* (1974), Joanna Russ’s *The Female Man* (1975), James Tiptree’s “The Women Men Don’t See” (1973) and *Up the Walls of the World* (1978) and Marge Piercy’s *Woman on the Edge of Time* (1976) not only the established male order is challenged, but also any form of ideology of dominance based on the Western rationalist model is questioned. These texts stand at the diametrically opposite pole of the texts arising out of the faith in Enlightenment rationalism like Isaac Asimov’s *Foundation* (1951). In these works the presence of an authoritative structure is implicated by the very fact of their struggle against it. This is also true of other works arising out of the postmodern questioning of organic identities and totalizing ideologies such as in the subgenre of cyberpunk. Cyberpunk pits marginalized and alienated characters against megacorporations in the backdrop of a postindustrial dystopia marked by high level of technological

⁶ Lefanu points out that science fiction’s position on the periphery of the mainstream literature makes it especially useful for dealing with gender issues. The feminist science fictions as seen in the works of Ursula K. Le Guin, James Tiptree, Joanna Russ, Marge Piercy, Octavia Butler, Pat Cadigan and male writers like Samuel Delany challenge typical gender roles and sexual conformism. These texts often equate the destructive tendency in society with male egoism and try to present an alternative vision by highlighting the need for empathy and communication. One strategy of subverting the dominant order is liberation from the cycle of reproduction. Shulamith Firestone advocated use of machines to bypass the burden of reproduction, which she thought was necessary for a feminist revolution. She also advocated “cybernetic communism,” which will transfer all the drudgeries to the machines and will help in integrating the women and children into the larger society. However, not all feminist writers reject the role of biological reproduction; rather some of the writers place the experience of motherhood at the center of female essence.

development and low life.⁷ These traditions display high level of dialectical propensity towards conformism and subversion.

In a similar manner, the science fiction texts that come out of the postcolonial countries question the very structure of power relations in the world. The use of scientific and technological metaphors in science fiction identifies it as a primarily western mode of literature. However, Patricia Kerslake in *Science Fiction and Empire* argues that science fiction and colonialism are irrevocably connected. For her science fiction can be greatly productive as a tool exploring “notion of power formed within the construct of empire, especially when interrogated by the general theories of postcoloniality” (3). Science fiction can as easily be used by the proponents of empire to project distorted visions of the Other as well as by the people trying to resist such stereotyping and cultural hegemony. Michelle Reid’s argument is much similar to Kerslake’s when she points out that postcolonial science fiction can bend premises of the Western modes of representation through employing what Homi Bhabha describes as “mimicry.” According to Bhabha the colonial subject is supposed to imitate the master, but he/she is always the “mimic man,” never the original. He argues that this mimicry that approximates the original yet can never be, is a method of resisting ideological subjectification—a way that corrupts the original by using its very own logic. Postcolonial science fiction mimics the techno-scientific metaphors of Western science fiction, yet uses those metaphors to question the primacy of Western civilization and charts out an independent future. This is a critical and dialectical process that brings into conflict the concepts of subversion and conformity. This is exactly what Nalo Hopkinson emphasizes in her preface to *So Long Been Dreaming: Postcolonial Science Fiction and Fantasy*. She invokes Audre Lorde’s famous lines “massa’s tools will never dismantle

⁷ William Gibson’s *Neuromancer* (1984), Piercy’s *He, She and It* (1990), Pat Cadigan’s *Tea from an Empty Cup* (1998) as well as movies such as Ridley Scott’s *The Blade Runner* (1982) and Wachowski brothers’ *The Matrix* (1999) would be good examples of this type of science fiction.

massa's house" (7) and comments, "I wanted to see what would happen if we handed out massa's tools and said, 'Go on; let's see what you build'" (9).

Such building process can be seen prominently in science fictions coming out of a developing country like India, which is gradually moving out of the shadow of the empire. These texts reflect the tendencies to conform to the Western ideals of development and at the same time to undercut such conformity. The dialectic between these two forces—push of the techno-scientific rationalism and pull of the pre-industrial mysticism—manifests itself in different guises—programmatically societies, genre bending hybrid styles, and fascination with a mechanized future. Much like the Western version, if not more, Indian science fiction exhibits this dialectical tendency. The construction of a schematic society entails a surface dialectic of the forces of authority and dissidence: authority, because the fictional universe follows a logic of its own in order to function properly; dissidence, because this construction necessitates a radical estrangement from empirical reality. In the negative utopias, or dystopias, the dialectic however goes deeper than this mechanistic level, in the sense that the creation of such a negative scenario through radical extrapolation of the contemporary social traits implies a desire to subvert it. Excellent examples of such texts would be George Orwell's *1984* (1949), Aldous Huxley's *Brave New World* (1935), Zamyatin's *We* or later feminist works like Margaret Atwood's *The Handmaid's Tale* (1985). Dystopic writings in Indian literature such as Rimi B. Chatterjee's *Signal Red* (2005) and Priya Sarukkai Chabria's *Generation 14* (2008) follow in a somewhat similar vein.

As is evident, the dialectical tendencies of the genre, both structural and thematic, places science fiction at a position from where it can act as a powerful tool for social, political and philosophical criticism. In fact Carl Freedman in *Critical Theory and Science Fiction* argues that critical theory that analyzes human cognition and science fiction that critiques the human condition are

intimately connected. Brian Attebery also sees science fiction as a “code” for dealing with social cultural and sexual issues.⁸ At the bottom of both their arguments lie the critical and cognitive attitudes that science fiction displays towards its subject matter, and its ability to imaginatively speculate with the important theoretical issues. Rather than going to the extremes, science fiction dialectically approaches the fundamental propensities that drive human civilization forward—that of conformity to the existing order and the urge of breaking away towards something radically different. This dialectical tactic, supplemented by the formal tension between “cognition” and “estrangement,” makes science fiction the genre most suitable to deal with the human condition in fictional yet theoretically informed manner. For the purposes of this project the dialectical aspect of science fiction would become one of the most important components. In the Indian texts under consideration the concepts of estrangement and cognition would often differ from their connotation in the West. It would be our aim to adopt a critical approach while analyzing them and bring out their dialectical quality in respect to their peculiar position at the interstices of cultures.

Postcolonial studies similarly pay attention to issues of authority and subversion, though not always in a dialectical way, and emphasize the discourse of hybridity. Postcolonial theorists such as Homi Bhabha and Gayatri Chakravorty Spivak employ post-structural approaches to challenge the essentialist philosophies of the imperialist and colonialist powers in order to create a constructive space, locate gaps and disjunctions in the dominant ideologies. These theorists attempt to renovate and appropriate the dominant English language and literature of the empire as a method of questioning the existing power relations. They also reinvest concepts such as subalternity, hybridity and mimicry with new subversive connotations, which undermine the essentialist and dualistic ideologies of domination

⁸ He argues this point extensively in “Secret Decoder Ring” in *Decoding Gender in Science Fiction* (2002).

rather than becoming weapons in their hands. Postcolonial fiction often writes back to the imperial center: rewriting major canonical works of English literature to resist and challenge the assumptions of the source texts (for example, Jean Rhys' *Wide Sargasso Sea* as a response to Charlotte Bronte's *Jane Eyre* and Tayeb Salih's *Season of Migration to the North* as a response to Joseph Conrad's *Heart of Darkness*). Postcolonial fiction also often resorts to estranging devices such as magical realism, fantasy and, increasingly, science fiction. In her essay "Postcolonial Science Fiction" Michelle Reid claims that science fiction can effectively express fundamental postcolonial concerns yet be different from its mimetic counterpart. She points out that the estranging capabilities of science fiction allow it to debunk the history of the real world. It can create worlds unburdened by colonial oppression—where the colonization never happened, or furthermore where the real world power relations are reversed and re-examined. She argues that the theme of colonization of other planets is very important in this aspect: "[. . .] the colonisation of other worlds raises the question of how these imagined worlds relate to 'real world' colonial legacies and situations. We should examine the connections more closely and not assume that science fiction merely provides a series of allegories or variations on the theme of colonization" (Reid). "Alien as the Other" is another potent science fictional trope that can be used to examine identity politics—racial, cultural, national and gender. Reid argues, "This strategy of literalising otherness can encourage the mainly white, Western science fiction audiences to examine prejudices and assumptions that they might be reluctant to face head-on" (Reid). Science fiction also imagines the future, in this case the postcolonial future. Uppinder Mehan in the afterword to *So Long Been Dreaming* argues that postcolonial fiction regularly examines the present reality as a legacy of colonial past but very few texts considers the future (with obvious exceptions). He contends that postcolonial writers must imagine their futures or risk having them written by others. Reid points out that, "Many science fiction futures are still implicitly white and Westernised, but science fiction also

offers a powerful means of imagining communities based on alternative social models that indicate the possibility of breaking out of cycles of colonial dominance” (Reid). Technology is another aspect of science fiction that can be exploited by developing nations to deal with the changing social structures—from mainly agrarian, pastoral culture to an industrial, “fabril” nation—a change that first saw the development of the genre itself in the 19th century Europe.⁹

Resistance, in its various manifestations, is central to postcolonial studies. This resistance is not only a political resistance of colonial people against the colonizers, but at every level of human existence—physical, social, cultural and most importantly ideological. The logics of colonization and imperialism employ various apparatuses, cultural and punitive, to create an environment conducive to the maintenance of a status quo of power relations, and in the process produce the colonial “subject,” “interpellated” within the ideologies of domination. Postcolonial theory as well as fiction attempt to resist these imperial efforts at ideological “interpellation.” Many postcolonial texts question the stereotypes created by the exclusionary and homogenizing principles of imperialism, emphasize difference, draw attention to the periphery as opposed to the center, and break down any form of authoritative structure in favor of “slippages” and “interstices.” At times these works fail in their attempt to come out of the dualistic nature of Western logic and, thus, succumb to the dominant ideology; nonetheless, many of these texts present alternatives through which the colonial subject can constantly challenge the primacy of imperialist doctrines.

⁹ In the “Introduction” to *The Oxford Book of Science Fiction* Tom Shippey writes:

A revealing way of describing science fiction is to say that it is part of a literary mode which one may call “fabril”. “Fabril” is the opposite of “Pastoral”. But while “the pastoral” is an established and much-discussed literary mode, recognized as such since early antiquity, its dark opposite has not yet been accepted, or even named, by the law-givers of literature. Yet the opposition is a clear one. Pastoral literature is rural, nostalgic, conservative. It idealizes the past and tends to convert complexities into simplicity; its central image is the shepherd. Fabril literature (of which science fiction is now by far the most prominent genre) is overwhelmingly urban, disruptive, future-oriented, eager for novelty; its central images is the “faber”, the smith or blacksmith in older usage, but now extended in science fiction to mean the creator of artifacts in general--metallic, crystalline, genetic, or even social. (ix)

Though the seeds of postcolonialism lies in the anti-colonial discourse of the resistance leaders like Mohandas K. Gandhi, Kwame Nkrumah and Aurobindo Ghosh, as well as intellectuals such as Rabindranath Tagore and W.B. Yeats in the early part of 20th century, it was in post World War II intellectuals like Albert Memmi, Aimé Césaire and Frantz Fanon that the concerns of the newly liberated colonies found expression. Memmi's *The Colonizer and the Colonized* (1957), Césaire's *Une Tempête* (1968), and Fanon's *Black Skin, White Masks* (1952) all highlight the importance of cultural domination in colonial and imperial policies. Their writings often draw on Marxism, especially the idea of revolution, as well as a psychoanalytic approach to understand the mind of the oppressed. However, postcolonial rhetoric sometime eschews theoretical intricacies and engages in a direct attack on Western values. This type of approach boils down to a form of essentialism that demands total decolonization and return to a mythical and organic precolonial past, rejecting any form of hybridity as aping of the colonizer. This form of essentialism can be found in instances of such resistance as the Negritude movement led by Leopold Sedar Senghor that emphasized the black essence in contrast to the white European identity. Other demands of total de-Westernization, including those of Islamic hardliners in various South Asian, African and Arab nations and Hindu nationalist discourse can be seen as the manifestations of similar resistance mechanism. Such resistance entails an essentializing and celebrating of racial (or religious or cultural) characteristics. But, like any other form of essentialism this approach often degenerates into provincialism and ultimately falls back to the exclusionary dualistic ideology of domination, only in an inverted manner. The opposite approach—refusal to engage in dualisms—is also seen as a viable option of resisting ideological domination. However, under the influence of post-structural theories postcolonial theory and fiction have increasingly employed deconstructive methods of defying the imperialist ideologies. These texts break down the binaries, on which Western epistemology functions, and set them into play. Postcolonial

texts frequently deploy hybrid identities that corrupt European purity, use fantastic elements that undercut rationalist epistemology and blur generic boundaries by distorting structures of European literary genres, and thus challenge hegemonic ideologies.

Being embedded within this postcolonial discourse Anglophone Indian science fiction exhibits the unmistakable characteristics of hybridity and subversion and works through a dialectic process; thus, it works as a perfect connector between the fields of science fiction and postcolonial studies. However, Anglophone Indian science fiction did not develop in isolation. Evidently it is influenced by Western and Indian epistemologies; it is equally influenced by science fictions written in various Indian languages. After all Indian science fiction has a history of nearly 175 years, almost the same as European and American science fiction. The first chapter, titled “Indian Science Fiction: A Historical and Critical Perspective,” surveys that history and examines the dominant thematic trends of the genre; this chapter also delineates the relationship between science fictions written in various indigenous languages and those written in English. This chapter places the development of science fiction as a genre in the Indian socio-cultural context, especially in the light of British colonialism. I argue here that the double dialectics that mark Indian science fiction arise out of the semantic and philosophical connotations of the concepts of science and scientificity. The major science fiction traditions of India, such as Bengali, Marathi and Hindi, in one way or other, display the working of these dialectical forces. I claim that the specific generic devices of Anglophone Indian science fiction enable a synthesis of these clashing tendencies, which projects futures marked by cultural hybridity and, often, exhibits critical and premonitory qualities. I also assert that the authors’ origin in the English educated, liberal minded middle class, and similar target audience underlie the tolerant approach visible in the genre.

The second chapter, “Mapping Tomorrows: Futuristic Discourses in Anglophone Indian Science Fiction,” takes a closer look at the futures imagined in six major works of Anglophone Indian science fiction: *The Calcutta Chromosome* (1996) by Amitav Ghosh, *The Last Jet-Engine Laugh* (2001) by Ruchir Joshi, *Signal Red* (2005) by Rimi B. Chatterjee, *Generation 14* (2008) by Priya Sarukkai Chabria, *Of Love and Other Monsters* (2007) and *Distances* (2008) by Vandana Singh. These fin de siècle texts expertly represent the main thrust of this genre—the conception of a futuristic postcolonial Indian universe. These works are spread out over the period that represents the main growth of Anglophone Indian science fiction (the last twenty years), and, thus, projects the steady development of the genre’s vision of the future. These futures, I argue, are combinations of utopic and dystopic qualities. Such futuristic social projections reflect the anxieties of a postcolonial nation moving towards greater mechanization and playing with different socio-political ideologies—from liberal democracy and politics of the subaltern to religious fundamentalism. Although the texts vary widely in their literary styles, all these projections display a stark disillusionment with unidirectional philosophies—Western or Indian—that refuses to acknowledge existence of other possibilities.

All these texts rather exhibit a profusion of hybridity on both thematic and stylistic levels. While Ghosh’s *The Calcutta Chromosome* primarily advocates an epistemology alternative to Western rationalism and tries to bestow power on the subaltern subjects of colonial domination, it also very subtly undercuts the great Indian Vedic tradition and established caste systems. On a stylistic level the novel incorporates ghost stories and folklores within a science fictional framework to distort generic conventions. Chatterjee’s *Signal Red* follows more steadily in the tradition of dystopic writing. Her novel, however, explicitly advocates for multiculturalism and an acceptance of differences in the context of Hindu fundamentalism for the nation to escape the traps of totalitarianism. *The Last Jet-Engine Laugh* perfectly represents this cultural complexity not only in its thematic aspect of

civilizational cross-pollination and the Indo-European origin and connections of its protagonists, but also in its fragmentary Postmodern writing style—a conglomeration of languages, voices and points of view—a perfect example of Bakhtinian heteroglossia. Sarukkai Chabria exhibits similar tendencies in *Generation 14*. The story of genetic engineering and cloning in a class stratified dystopia complements the theme of hybridity and resistance at the thematic level. Vandana Singh too engages in this discourse of understanding and acceptance of Otherness in both *Of Love and Other Monsters* and *Distances*. Except for *Distances* all these texts deal directly with India in different stages of its future history. They utilize the nation's past not only to reconcile the present turmoil of the country but also to extrapolate the future of the nation. None of these works suffer from the penchant for a nativist fantasy of a precolonial utopia or subscribe to the discourse of Hindu purism. Neither do these texts serve under the Western exoticizing impulses to corroborate the colonial visions. These works rather present a “disillusioned” vision of the country and its mores.

The third chapter, “Authoring Someone Else’s Future: India in Anglo-American Science Fiction,” analyzes British and North American science fictions where India or Indian culture takes center stage. I argue that in contrast to the Indian futures projected by the native authors, Western writers display a tendency to fall back on the Orientalist stereotypes, and, thus, provide a prejudiced vision. I don’t presume to conflate North American and British encounters with India. Both these regions have their own distinct relationships with India and Indian culture. While any text written about India in British culture would be marked by a colonial subtext, because of the US and Canadian relationship to India, North American texts would come from a more disengaged point of view. While the Indo-British relationship is marked by a master-subject dichotomy, the contacts with the US and Canada were primarily as a distant curiosity and only recently as a modern political entity. However, British and North American culture ultimately arise out of Western rationalism and both, to differing

degrees, follow the European tradition that exoticizes the Orient. This is evident in the fact that North American culture directly claims its ancestry in European masters rather than in the Native American tradition. India and its culture stand in contrast to this Western tradition. This chapter discerns the Western visions of India from the American, Canadian and British science fictional tropes.

I analyze five Anglo-American works in this chapter: *Lord of Light* (1967) by Roger Zelazny (USA), *Shiva 3000* (1999) by Jan Lars Jensen (Canada), *Dragon Fire* (2000) by Humphrey Hawksley (UK) and *River of Gods* (2004) and *Cyberabad Days* (2009) by Ian McDonald (UK). These are some of the few texts in the Anglo-American science fiction tradition that comprehensively treat India and/or Indian culture in futuristic contexts. Not surprisingly a clear division is visible between the British and the North American texts. While both Zelazny and Jensen display an exotic wonder towards Indian culture and deal with clichéd Orientalist spirituality, Hawksley and McDonald treat India on more solid geographical, social and political grounds. On the one hand, the North American texts use India and its culture as devices of estrangement to weave their story and lack any proper understanding of the source culture. On the other hand, the British texts, especially McDonald's books, exhibit a much nuanced comprehension of the complexities of India and its cultural politics and try to project a more plausible vision of the future world. In these works India is not only a device of estrangement, but rather the cognitive source of that estrangement. However, both sets ultimately end up creating Western stereotypes of India. With the exception of *Dragon Fire*, the Western books mostly emphasize the hackneyed spiritual and religious dimensions, while displaying a general lack of understanding of the subtler social and political currents. As a result, the Indian future in Western writing remains subject to the same prejudiced vision that characterized Western writing about the Indian past.

Because of this still persisting exoticism in Western writing about India, the last chapter, “Conclusion: Postcoloniality, Science Fiction and India,” claims that if Indian authors do not write their own future, it will be written by the same imperial forces that wrote their past and will endure similar biases. I emphasize this fact because Anglophone Indian science fiction is probably the genre best equipped to project the Indian future on the global stage, its potential readership being not restricted to the domestic sphere. Yet, till date, this remains a genre largely ignored by the scholars of postcolonial literature. This genre possesses the perspectives of both Western and Indian cultures as well as the powerful critical devices of science fiction to break free of constraints of recorded history. While possessing the nuances of perception, realistic postcolonial literature lacks science fiction’s power of spatio-temporal liberation. Thus, I argue, Anglophone Indian science fiction indicates a new stage in postcolonial Indian literature—a stage that demands vision of the future rather than rumination of the past. “Other Tomorrows” can claim the distinction of being one of the first scholarships that study Anglophone science fiction written by Indian authors. However this dissertation does not claim to be an exhaustive study of the field; rather, being the first analysis of this kind, it opens the door for future research.

CHAPTER I

INDIAN SCIENCE FICTION: A HISTORICAL AND CRITICAL PERSPECTIVE

Science fiction in India emerged as a result of an alien encounter—contact with the British colonizers.¹⁰ Although it lacks a strong tradition compared to the developed industrial nations, the historical emergence of the science fiction genre in India occurred around the same time as in Europe and America. The first science fictional or futuristic tale, Kylas Chunder Dutt's "A Journal of Forty-Eight Hours of the Year 1945," written in English, was published in 1835 only seventeen years after Mary Shelley's *Frankenstein* (1818, England), eleven years after Faddei Bulgarin's *Plausible Fantasies or a Journey in the 29th Century* (1824, Russia), the same year as Poe's *Hans Phaall—a Tale* (1835, America) and almost thirty years before Jules Verne's *Five Weeks in a Balloon* (1863, France). Although from this point onwards the genre in India developed mostly in various indigenous languages such as Bengali, Marathi and Hindi, science fiction written in English sees a resurgence towards the end of the last century.¹¹

Yet, this 175 years of history (almost same as European or American science fiction) has not attracted sufficient scholarly analysis; at least not in the English language. Individual works of fiction such as Amitav Ghosh's *The Calcutta Chromosome* (1996) or Rokeya Shekhawatt's *Sultana's Dream* (1905) have received due attention at times, but the science fiction genre as a whole has mostly been ignored by the scholarly establishment—inside and outside India. Hans Harder's article "Indian and International: Some Examples of Marathi Science Fiction Writing" published in *South Asia Research*

¹⁰ In his blog interview with Vandana Singh Anil Menon says, "Indeed, "Indian" SF seems to have come out of the native experience with the inscrutable British. (The Portuguese and French dominated areas don't show a similar evolution.) Perhaps it's satisfying to think that Indian SF originated in a true alien-contact story."

¹¹ See *Encyclopaedia of Indian Literature Vol. 5* (Ed. Amaresh Datta; New Delhi: Sahitya Akademi, 1992) for information on science fiction in various Indian languages.

(2001) and Debjani Sengupta's "Sadhanbabu's Friends: Science Fiction in Bengal from 1882-1961" published in *Sarai Reader 2003: Shaping Technologies* (2003) look at the historical and generic concerns of science fiction in the respective languages. However, these well-researched articles limit themselves linguistically as well as methodologically. The attempts at a holistic approach in the indigenous languages do not fare any better either. The *Encyclopaedia of Indian Literature* (1992) also limits itself to naming some of the important writers and a very brief history when talking about science fiction; and even then, it breaks down the genre's development in the different Indian languages without deciphering any overarching trend. The only attempt to tackle the development of the genre as a whole in India can be seen in Bal Phondke's introduction to *It Happened Tomorrow* (1993). Although Phondke's effort delineates some of the characteristics of Indian science fiction as a whole, it lacks depth in research and is mostly oriented from a practicing Marathi science fiction writer's point of view. I however acknowledge that taking a holistic approach in something as diverse as Indian literature is always a very difficult task. Still Phondke's analysis fails to recognize the fundamental quality of Indian science fiction: the dialectical aspects that emerge from Indian science fiction's dual origin in Western and Indian traditions. He depends too much on comparison between Anglo-American science fiction and their Indian counterparts rather than discerning intrinsic literary qualities of the Indian works, ignores various socio-historical influences, and does not even acknowledge the existence of Anglophone Indian science fiction, although the collection itself includes works originally written in English.¹² Consequently, there is need for a scholarly research that can bring out the historical developments and generic trends in Indian science fiction. This chapter offers a

¹² Although someone might argue that Phondke's essay comes at the head of the rush of Anglophone Indian science fictions in the 1990s starting with Amitav Ghosh's *The Calcutta Chromosome* (1995), texts such as Tung Lee's *The Wind Obeys Lama Toru* (1967), Boman Desai's *The Memory of Elephants* (1988), J. V. Narlikar's *The Return of Vaman* (1989) and Mathew Panamkat's *Lusooma* (1992) have already been published. Phondke also ignores such earlier utopic and futuristic texts as Suniti Namjoshi's *Mothers of Maya Diip* (1989), Rokeya Shekhawatt's *Sultana's Dream* (1905), K. C. Dutt's "A Journal of Forty-Eight Hours" (1835) and S. C. Dutt's "The Republic of Orissa" (1845).

comprehensive historical and critical perspective on Indian science fiction by examining the major science fiction traditions in India, such as in Bengali, Marathi and Hindi, and thus places Anglophone Indian science fiction in a literary and cultural context.

Indian science fiction is as much a product of traditional Indian imaginative literature as of Western scientific ideas. In other words, the genre is influenced simultaneously by the “cognitive” mode of Euro-American science fiction as well as by the ancient precritical traditions of myths and legends of the country such as fantasy, ghost stories, folk tales, fairy tales and mythological narratives. Science fiction in India, especially in the postcolonial era (when most of the Indian English works were written), is a creation of a society at once driven by a fast growing materialistic industrial economy as well as the metaphysical and pastoral traditions that has existed for millennia. These works subtly challenge the normativity of Occidental literary forms and ideas, yet never fully reject the main generic tendency, which Darko Suvin describes as “cognitive estrangement.”

Before proceeding to the discussion of Indian science fiction, however, we need to pay attention to the concept of “science” as understood in India, and its social connotations. There are certain differences in the association of meanings between the Indian and the Western concepts of “science.” Recognizing these linguistic and semantic differences is vital to the understanding of the nature of Indian science fiction. In “Indian and International: Some Examples of Marathi Science Fiction Writing” Hans Harder explains:

In the Indian context, the word ‘science’ (together with its Indo-Aryan neologism *vijnana*) rings different than in the West: less well-defined and at the same time more loaded with polarising connotations. Like the pairs *dharma*/‘religion’ and *darsana*/‘philosophy’, *vijnana*/‘science’ represent an instance of the complexities of intercultural semantics. All these terms, even when explicitly used solely as equivalents of their respective Western concepts, tend to retain some of their former semantical content. While this may appear less problematic in the case of *vijnana*, a term less central and semantically more confined than the other terms mentioned, ‘science’

however creates additional difficulties because the thing denoted by it was and is often perceived as something specifically ‘Western’. In nineteenth-century India, while religion and philosophy were certainly seen as integral parts of pre-colonial India—whatever may be the terminological problems involved—‘science’ (in the sense of technology and as the producer of various gadgets), often appeared as an attribute of European civilisation. (105)

Not surprisingly science fiction in India emerged only with the arrival of such European “science,” which was introduced into the Indian life by the advent of the British colonizers and their advanced technology.

Establishment of scientific education by the British played a major role in arousing scientific consciousness among the Indians. It worked in two ways: at one level science became the challenger of pre-colonial epistemology based on religion and philosophy, and thus resulted in a polarization among the Indian intellectuals. On another level, science acted as a tool for progressive Indian nationalists to root out social evils and create a “modern” India. The founding of Hindu College in Kolkata (1817), which catalyzed the Bengal Renaissance, led to the establishment of English education and with that Western science—physics, chemistry etc. While a section of the orthodox Hindu Brahmins rejected this Western mode of education as foreign and debasing to the indigenous tradition, social reformers and intellectuals such as Raja Rammohan Ray, Iswarchandra Vidyasagar, Ashutosh Mukherjee, Mahendralal Sircar and Akshay Kumar Datta embraced this opening up of horizons to cultivate modernity among the new generation of Bengalis. Founding of the major colonial universities in Mumbai (then Bombay), Chennai (then Madras) and Kolkata (then Calcutta) in 1857 and the establishment of Archaeological Survey of India in 1861 further added to this impetus of scientific modernization that started to spread all over India.

In her essay “Sadhanbabu’s Friends: Science Fiction in Bengal from 1882-1961,” Debjani Sengupta draws a direct link between this increased scientific consciousness and scientific writing—

both fictional and non-fictional. She mentions Mahendralal Sircar (1833-1904), one of the founders of Indian Association for the Cultivation of Science in 1876, and Ashutosh Mukherjee (1864-1924) as two figures responsible for encouraging scientific thinking in Bengal. Akshay Kumar Datta (1820-1886), a graduate of Hindu College and a declared rationalist, was also one of the earliest practitioners of scientific writing in Bengali. But the best examples can be seen in Jagadishchandra Bose (1857-1937) and Jagadananda Roy (1869-1933). Bose, who was a professor of physics in Presidency College (the former Hindu College) and one of the world's leading scientists on electromagnetic waves, was also one of India's earliest writers of science fiction.¹³ Similarly, Jagadananda Roy was highly interested in science and astronomy and taught science in school. His short story "Shukra Bhraman" (Travel to Venus 1879) describes an interstellar journey and alien creatures. In fact his description of creatures on Uranus is strikingly similar to, and consistent with, the theory of evolution that Darwin proposed a couple of decades earlier in Europe. The first science fiction in India dealing mostly with technology was also written in Bengali—Hemlal Dutta's "Rahasya" (The Mystery, 1882)—that centered on an completely automated house and included innovations such as automatic doorbells, burglar-alarms and self functioning coat brushes. According to Bal Phondke, Marathi science fiction too emerged around the close of the 19th century. He mentions "Tareche Hasya" by S.B. Renade and *Srinivasa Rao* (Phondke does not give the exact dates) by Nath Madhav to be some of the earliest examples. Arvind Mishra makes similar claims for Hindi science fiction. He marks Pandit Ambika Datta Vyasa's "Ascharya Vrittant" (A Strange tale), published in a popular magazine *Peeyush Pravah* in 1884, as the first specimen of Hindi science fiction. Mishra also mentions Babu Keshav Prasad Singh, Rahul Sankrityayan, Acharya Chatursen Shastri and Dr Sampurnanand as some of this genre's

¹³ Bose's 1886 story "Palatak Tufan" (The Runaway Storm) used the scientific theory of surface tension to control atmospheric elements and pacify a dangerous storm over the Bay of Bengal.

early exponents in Hindi. References to translations of Jules Verne and H.G. Wells can also be found in Bengali, Marathi and Hindi around the turn of the century. In fact, Western writers such as Verne, Wells, Henry Rider Haggard and Arthur Conan Doyle acted as influences in some of the early twentieth century indigenous science fiction and adventure literature such as Bhibhutibhusan Bandyopadhyay's *Chander Pahar* (Mountain of Moon, 1937) and in numerous works of popular Bengali writer Hemendra Kumar Roy.

However, accommodation of European "science" within Indian social discourse of the 19th century led to further reinforcement of an East/West binary. Harder suggests that everything Indian was associated with, mainly Hindu, spiritualism and everything European, connected to science. Even the famous Bengali spiritualist Swami Vivekananda (1863-1902) juxtaposed the "spiritual East" and the "materialistic West" in his social and religious discussions, which impacted the popular imagination to a great degree. This type of polarization contributed considerably not only to the Orientalist slant of the European view of India, but also to the world view of a section of the native intellectual class. While the evidence of the first is aplenty in European discourse about India, epitomized by Kipling's lines "Oh, East is East, and West is West, and never the twain shall meet" ("The Ballad of East and West," 1889), the reflection of the latter can be seen in Bankimchandra Chattopadhyay's construction of the East and West along similar lines in many of his novels.¹⁴ Hindu nationalists often exploited this divide by extending the religion/science binary as Indian/European binary. Yet, other 19th century social movements such as Henry Louis Vivien Derozio led Young Bengal and the Brahmo Samaj (characterized by reformation of Hinduism and rejection of polytheism)

¹⁴ Bankimchandra Chattopadhyay's *Anandamath* (1882) and *Debi Chaudhurani* (1884) along with many other novels deal with the theme of opposition between the East and the West.

led by Rammohan Ray and Debendranath Tagore created a counter current to such polarization. These movements advocated rationalist thinking and liberal acceptance of Western knowledge.

This rationalist trend of the 19th century again had a curious offshoot which would exert a huge influence on future Indian scientific thinking. According to Harder, this offshoot ensues from Vivekananda's opinion that India can become superior to her European colonizers as soon as she masters science (unlike Gandhi's rejection of mechanization of the society and call to return to simple village life). Though Vivekananda's call inspired rationalist thinking among the Indian populace, it also found a curious echo in Swami Dayanand Sarasvati's (1824-1883) connecting of Vedic knowledge with modern science. In Harder's words:

[. . .] Dayanand Sarasvati's interpretation of the Vedas was characterised by certain nativistic identifications of old terms with modern technical devices, and it was in this Arya Samaj tradition that, for instance vimanas came to be identified with airplanes—resulting in the claim to precedence in all technical matters on the part of India. 'Science' was thus, with the aid of the construction of a Golden Age, re-projected unto the Indian past and presented as something essentially Indian. (106)

This tendency of associating Vedic knowledge and Western science would lead to the establishment of Vedic science as an alternative to Western science and would impact the discourse of Hindu nationalist movement during the freedom struggle as well as in the postcolonial era. The concept of Vedic science also influences such science fiction writers as Lakshman Londhe and Chintamani Deshmukh who incorporates mytho-religious elements from India's ancient tradition in their stories (this trend is evident even in some works of J. V. Narlikar, who is also India's premier astrophysicist).

One of the root causes that boosted the process of scientific thinking and consequently writing of science fiction was the introduction of the English language in the Indian social fabric. The British education system was institutionalized with the founding of Hindu College in 1817 in Kolkata and

soon took a definite turn towards creating “mimic men” in a Macaulayan mould. In his 1835 *Minute on Indian Education* Thomas B. Macaulay argues,

We must at present do our best to form a class who may be interpreters between us and the millions whom we govern; a class of persons, Indian in blood and colour, but English in taste, in opinions, in morals, and in intellect. To that class we may leave it to refine the vernacular dialects of the country, to enrich those dialects with terms of science borrowed from the Western nomenclature, and to render them by degrees fit vehicles for conveying knowledge to the great mass of the population. (130)

Evidently this whole educational apparatus grew out of the necessity to cultivate a “medium of intercourse between the Government and its subjects, between the natives of Europe who are to rule, and the inhabitants of India who are to obey” (Halhed, qtd. in Mehrotra 4). However, that “medium” for the Indians very quickly became not only a symbol of power but a new instrument for expression—a mode of expression that is communicable to the colonial power. Consequently, English writing in India during the 19th century flourished among the indigenous educated middle class, who had the most frequent interaction with the British. Neither does it come as a surprise that Indian writing in English, with its connotation of power politics, in one way or other addresses issues of national identity. During the colonial period English writings either whetted nationalist feelings and subversive ideology or pleaded with the colonial power for more understanding. After independence the writings turn more towards reinterpreting and reimagining the nation’s history—an exercise in negotiating the nation’s “tryst with destiny.”¹⁵

¹⁵ In his famous “Tryst with Destiny” speech delivered to the Indian Constituent Assembly on the midnight of 14-15 August 1947, when India gained independence from Britain, the first Prime Minister of the country Jawaharlal Nehru said: Long years ago, we made a tryst with destiny, and now the time comes when we shall redeem our pledge, not wholly or in full measure, but very substantially. At the stroke of the midnight hour, when the world sleeps, India will awake to life and freedom. A moment comes, which comes but rarely in history, when we step out from the old to the new, when an age ends, and when the soul of a nation, long suppressed, finds utterance. It is fitting that at this solemn moment we take the pledge of dedication to the service of India and her people and to the still larger cause of humanity. (Constituent Assembly)

Contradictory attitudes toward discourses of power mark Indian English writing from its earliest moments. On the one hand a part of the indigenous bourgeoisie like the Bengali social reformer Raja Rammohan Ray vehemently argued for the introduction of English education with the aim of educating the common man in western sciences; on the other hand Ray himself used the English language as an instrument of self-assertion against colonial discrimination.¹⁶ On the one hand knowing English meant the prospect of getting favors from the British; on the other, it also meant access to the power to make one's voice heard not only to the higher authorities but also across the nation and across the barrier of the indigenous languages. Appropriately, one of the earliest fictions written in English turns out to be a science fictional account of a future rebellion against the British rule. Kylas Chunder Dutt's "A Journal of Forty-Eight Hours of the Year 1945" (1835) is not only significant in its prophetically close prediction of the year of Indian independence, its date of publication in 1835, the same year as Macaulay's *Minute*, also predicts the future fate of the English language at the hands of the "mimic men." Arvind Krishna Mehrotra comments:

In a double irony, the insurgents are all urbanized middle-class Indians with the best education colonialism could offer, the very class Macaulay had intended as 'interpreters between us and the millions whom we govern'. A fable like 'A Journal of Forty-Eight Hours', where the 'language of command' is stood on its head and turned into the language of subversion, suggests itself as the imaginative beginning of a nation. (7)

"A Journal of Forty-Eight Hours" (published in the *Calcutta Literary Gazette*) describes a revolution after a prolonged period of British oppression:

The people of India and particularly those of the metropolis had been subject for the last fifty years to every species of subaltern oppression. The dagger and the bowl were dealt out with a merciless hand, and neither age, sex, nor condition could repress the rage of the British barbarians. Those events, together with the recollection of the grievances

¹⁶ Bruce Carlisle Robertson in his essay "The English Writings of Raja Rammohan Ray" (anthologized in Mehrotra) describes an acrimonious encounter between the English Collector Sir Frederick Hamilton and Raja Rammohan Ray and the ensuing epistolary complaints and explanations to Lord Minto. Robertson argues that Ray's complaints were heard by the higher authorities only because Ray wrote the letters in English.

suffered by their ancestors, roused the dormant spirit of the generally considered timid Indians. (Quoted in Mehrotra 94)

The piece depicts a battle between an Indian army led by English educated and charismatic Bhoobun Mohan and the British colonizers, whose leaders are named appropriately Governor Lord Fell and Colonel John Blood-Thirsty. Though the Indian patriots are victorious in the earlier stages of the battle, they are defeated in their attempt to capture the British military stronghold Fort William in Kolkata. Bhoobun Mohan is decapitated after urging his fellow soldiers to continue the struggle. Although the text is clearly radical in its intentions, the possibility exists that the writer's position as a British subject kept him from pushing the revolutionary spirit too far.

"The Journal" was followed in 1845 by a similar futuristic account, "The Republic of Orissa: A Page from the Annals of the 20th Century," (published in *Saturday Evening Harakuru*) by Shoshee Chunder Dutt, also written in English. This text too describes a future (1916) battle of independence in the state of Orissa. While in the first story the rebellion is ultimately defeated, this story presents an optimistic result for the revolutionaries. S. C. Dutt's radical narrative sees the doubly oppressed tribes, not the urban educated middle class, as the breeding ground of potential revolutionaries.¹⁷ The story starts against the backdrop of a fictitious Slavery Act passed by the British in 1916 that leads to a violent rebellion against the British by the forces from Bengal, Bihar and Orissa. This battle is led by the chief of the Kingery tribe Bheekoo Barik. The Indian forces defeat a large army of Irish soldiers led by Sir J. Proudfoot, capture the fictitious fort of Radhanaugger and compel the British to come to a truce. The story then describes a second battle incited by the non-execution of the treaty by the British

¹⁷ In an Ironic manner "The Republic of Orissa" anticipates the tribal Naxalite rebels that rose and operated in that same geographic region more than a century later; the irony is that their rebellion is against the "free" Indian government. This future event uncannily refers back to Dutt's choice of the rebels in his story. This tribal population was oppressed not only by the British colonizers but also by the indigenous landed class making them a class at the lowest rung of social repression and most likely to deal out violent retribution.

which ultimately leads to the independence of the state of Orissa and the slow decline of the British Empire.

Both “The Republic of Orissa” and “A Journal of Forty-Eight Hours” are not science fictions in the sense that they do not use any scientific tenets and then weave a tale from the assumptions; neither do these texts deal with advanced technology. But, they surely fall in the line of utopian writings in their political motivation and portray future events and societies by extrapolating current socio-political trends. The estrangement that takes place in these texts is temporal—both the stories present events many years in the future—but those events, that have not yet taken place in the authors’ empirical world, though are very real possibilities in their contemporary Indian milieu. Furthermore, the actions that follow the temporal displacement are its logical consequences, which engender the “novum” of future independence into the world of colonized India. These qualities are obvious markers of science fiction. However, in these texts science fiction does not only work as a mode of commenting on the present plight of the Indian population, but it also creates a nascent futuristic discourse about nationalism. Thus, one and a half century hence, when Anglophone Indian science fiction constructs a futuristic postcolonial discourse, it actually fulfills the promise seeded in the earliest English texts written in the genre.

In other words, Indian science fiction acquired a dialectical tendency from its very inception. On the one hand it accommodates Western scientific thinking in its conceptual universe and sometime even uses the language of the European colonizer; and on the other hand it uses those concepts and language to challenge the authority of the Westerners. In some cases Indian science fiction challenges the epistemological and ontological bases of Western knowledge itself, and in others, it eagerly follows the Western scientific path. This dialectical trend will be manifested in science fiction written in India

throughout rest of the nineteenth and the twentieth century, alternately supporting indigenous epistemology and promoting Western science and rationality.

As a matter of fact, science fiction in India is often related to the dissemination of scientific knowledge, and in its early stages, was in a reciprocal relationship with scientific writing, much like the science fiction magazines of the Gernsback and Campbell era in the USA. This trend can be seen during the late nineteenth and early twentieth century in writers such as Akshay Kunar Datta and J. C. Bose. But Phondke is of the opinion that with the establishment of avenues for non-fictional scientific writing since the mid-twentieth century, these two slowly parted company. However, in India science fiction is still seen as an avenue for popularizing science and a close ally of science writing, rather than literature.¹⁸ Though this may seem like a utilitarian approach, even a lot of the practicing science fiction writers in regional languages today feel that their stories need to have some “science” in it to become science fiction; most of the time this “science” is interpreted in its superficial sense. Accordingly, contemporary writers like Phondke and J.V. Narlikar prefer to have hard science in their science fiction than “soft” or social sciences. If we look beyond the obvious imaginative and adventure elements in this genre, science popularization is one of the main reasons why science fiction in India finds its main abode in children’s and juvenile literature. This also explains why Indian science fiction almost totally eschews the vulgarity not uncommon in other indigenous pulp literatures like horror, detective stories and romance. For similar reasons, until very recently sex was also totally a taboo in Indian science fiction. Although traditional Indian values mostly explain this absence, there is also this feeling that science fiction needed to have a pure denizen for the science to operate.

¹⁸ This is most poignantly expressed in the fact that the first ever national discussion on science fiction titled “Science Fiction: Past, Present, Future” was organized in November 2008 jointly by National Council for Science and Technology Communication (NCSTC), Indian Science Fiction Writers Associations (ISFWA) and Indian Association for Science Fiction Studies (IASFS).

Nevertheless, Indian science fiction is not limited to fiction bound strictly by scientific principles; a considerable number of these texts display marked subversive tendencies not only towards Western normativity, but also towards the monolithic and totalizing propensities of science itself. While the first tendency is seen mostly in Hindi and Marathi science fiction, Bengali and English science fiction kneels towards the latter. The term used for science fiction in Hindi and Marathi, “vijñan katha” (stories of science), essentially calls for direct scientific elements in them. Though the definitional debates on the genre is just beginning in the Indian languages, the Bengali term, “kalpavijñan” (imaginative science), makes this genre much wider and inclusive. Bengali science fiction all through its development shows a marked propensity towards subversion of the Western norms. But some of the best examples can be seen in their displacing of the colonial power relations and breaking of the East/West binaries and setting them into play, especially in the postcolonial era (the second half of twentieth-century). Furthermore, science fiction in Bengali is often accepted into mainstream literature in a greater degree than in most other indigenous languages through the writings of such established literary figures as Shirshendu Mukhopadhyay, Premendra Mitra, Sunil Gangopadhyay, Anish Deb, Himanish Goswami, Leela Majumdar, Syed Mustafa Siraj and Satyajit Ray. Similar tendencies are also seen in Anglophone Indian science fiction. Most of the writers in English with an international audience at their disposal, also display disinclination towards genre-boxing and advocate generic and stylistic hybridity.

A large number of mid and late twentieth-century Bengali science fiction and almost all Anglophone Indian science fiction assign agency to the marginalized and raise questions about identity. These works often take apart the dualisms that have been intrinsic to the Western civilization’s domination of “Others”—self/other, mind/body, culture/nature, male/female, God/man, maker/made, reality/illusion, whole/part etc.—the first term always being the dominant one. Rather,

these works of science fiction cultivate multiplicity and reject the idea of essentialism. Often, in a Derridian manner, these texts break down myths of organic identity as social constructs and expose them as devices of domination used by the hegemonic class; in a manner akin to Donna Haraway's "Cyborg feminism" these works indicate that marginalized entities should operate on the principle of affinity rather than on some essential identity.¹⁹ In these texts sometimes the positions of the binaries are simply reversed and sometimes the whole epistemological system on which such binaries operate are rejected. However, the result of such philosophical patchwork often result in texts that exist on the borders—on the cultural "interstices," as Homi Bhabha puts it.

The corpus of Anglophone Indian science fiction yields many such instances. While Begum Rokeya Shekhawatt Hussain's 1905 novella *Sultana's Dream* simply reverses the gender roles, Rimi Chatterjee's 2005 novel *Signal Red* rejects militant nationalism. *Sultana's Dream*, probably the first science fictional text in Indian English written after "The Republic of Orissa," reverses the gender roles through the creation of a feminist utopia, where Hussain rather than rejecting the rational ideologies of West embraces them to achieve female emancipation from an orthodox Muslim society.²⁰ However her novella rejects the oppressive elements inherent in any imperial discourse. Conversely Chatterjee's *Signal Red* written a hundred years later at the high time of Hindu nationalism presents an aggressive decolonization of the nation and appropriation of knowledge by positing the Orient as the

¹⁹ Donna Haraway in her "A Manifesto for Cyborgs: Science, Technology, and Socialist Feminism in the 1980s" argues that modern high-tech culture puts the binaries of power into play: "Insofar as we know ourselves in both formal discourse [. . .] and in daily practice [. . .] we find ourselves cyborgs, hybrids, mosaics, chimeras" (2296). Haraway rejects the notion of essentialism and the myth of an organic wholeness. Such myths are social constructs, as are the social identities of human beings. She deconstructs such myths by marking them as devices of domination used by the patriarchal, Christian and by extension capitalist society and points out that marginalized entities should operate on the principle of affinity rather than on some essential identity. Haraway places cyborgs on the intersections of the cultural binaries and hence outside the traditional patriarchal and capitalist Western society.

²⁰ Rokeya's text is a pioneering work that anticipates such feminist science fictions as Charlotte Perkins Gillman's *Herland* (1915).

origin of all epistemologies of the world. This book warns of the dangers of replacing one form of hegemony by another. Both these texts articulate gender issues. But while Rokeya's text was a pioneering work encouraging female emancipation, and emphasizing the role of rational thinking in the process, Chatterjee's novel portrays the failure of such process a hundred years later, and by doing so questions the very association of science with rationality, taken for granted in the Western discourse.

Such questioning of scientific rationales can be seen in an even heightened manner in works of Sukumar Ray (1887-1923), who experimented with Western literary forms such as nonsense verse, fantasy and science fiction. His specialty was in adapting the western forms in the Indian context and completely transforming them into something uniquely Bengali. In his "Heshoram Hushiyarer Diary," (The Diary of Heshoram Hushiyar, 1922) which was probably influenced by Doyle's *The Lost World* (1912), he parodies science fiction and adventure tales and the scientific process of naming. Though apparently this is a story of exploration, the process of naming animals plays with the idea of language's arbitrariness—Ray toys with the idea that names should be linked with something inherent in the object. He names creatures in the story accordingly—"Hanglatharium" (hangla=greedy), "Gomratherium" (gomra=grumpy), "Chillanosaurus" (chillano=shriek) etc. This work also questions the rationale of scientific exploration by portraying the characters as rather self seeking and bent on acquisition albeit in a comical manner. However this total dismantling of the genre is very rare in Indian science fiction literature—even in works that directly deal with the politics of power.

However, in science fictions published around the time of the national independence in 1947 the subversion of the established world order is remarkable. Most important among these are two series written in Bengali—tales of Ghanada by Premendra Mitra (published between the mid 1940s and the late 1980s) and adventures of Professor Shanku (1965-1992) by Satyajit Ray (son of Sukumar Ray and

more famous as an Oscar winning film director). Both these series, which have been translated into English, are highly influenced by Western science and science fiction, yet have unique ways of challenging the normativity of this tradition.²¹ These two series are hugely popular among Bengali reading public and has even transcended barriers of language (through translation) by finding readership in linguistic communities other than Bengali (a rare occurrence in popular Indian literature).²²

Most of the adventures of Ghanada are hard science fictions based on some clearly formulated scientific principles. These range from theories of black hole and multidimensional universe to genetics and biological mutation. Many of these stories have an international setting and involve European characters (such as Nazi leaders or British intelligence agents), but Ghanada's brainpower ultimately wins the day. The reversal of binaries is very apparent at this level: the imperial power bows to the solitary colonial subject. But the subversion at a subtler level resides in the framework of the stories. In Mitra's own words these stories are written in the form of "tall tales." Ghanada, who is a typical urban Bengali character, resides in a men's hostel in Kolkata, seldom goes outside of his den, and lives off other residents. He is portrayed as a glutton and apathetic to the smallest action. He narrates the stories of his "adventure" to a group of young hostel residents who enjoy them through their "willing suspension of disbelief." The narrative structure, thus, works as a metafictional comment and points towards the fictionality of all discourses. This metafictional device though in no way makes

²¹ Mitra's Ghanada stories have been translated into English in *Adventures of Ghanada* (1982) and *Mosquito and Other Stories: Ghana-Da's Tall Tales* (2004). Stories of Professor Shanku has also been translated into English as *Bravo professor Shanku* (1986), *The Unicorn Expedition, and Other Fantastic Tales of India* (1987), *The Unicorn Expedition and Other Stories* (2004), *The Diary of a Space Traveler and Other Stories* (2004).

²² Similar credit can be given to the Hindi comic book series *Chacha Chaudhary* (starting 1971) by Pran. However, in this series no consistent science fiction element can be found, except in Sabu, the giant Jovian companion of the diminutive hero Chacha Chaudhary, and the occasional alien abductors and immortal giant villains. But, most of the time these are more fantastic than an expression of cognitive estrangement.

Ghanada's adventures non-science fictional in the Suvinian scheme of things. These stories clearly show presence of the Suvinian norms in the estranging principle, the internal consistency of the plots and the bringing forth of a "novum" in the process of narration. Yet these stories add another level of estrangement as a narrative ploy by making the framing device not different from the author's empirical environment: every story begins in the common room of the men's hostel of mid century Kolkata as a tall tale told by Ghanada. The estrangement however becomes radical once we enter the universe of Ghanada's tale. The narrative frame thus functions as a metafictional device that demonstrates the process of estrangement by placing the reader outside the core story and laying bare the narrative process itself. This ploy puts the stories on a fine balance between cognitive, if they are true, and wholly fantastic, if they are lies. Mitra thus bends the genre in a subtle yet definite manner. Mitra explicitly commented that he created a hero for his science fictions who is completely antithetical to the Western hero—someone who apparently is more efficient with his tongue than his body. This ploy also undercuts the heroic quality of science fiction by rendering it as only a product of a fertile imagination. However, in Mitra's other science fictions this metafictional device is not always present. But, in those works too the "third world" often gets the better of the "first world" nations, or peoples from the underdeveloped nations take the center stage. This can be seen in his most famous work *Piprey Puran* (The Story of the Ants) that describes the takeover of the earth by giant ants in the far future or in *Mangal Bairi* (Martian Enemy) and "Kalapanir Atale" (Under the Ocean).

The tales of Professor Shanku by Satyajit Ray are much simpler in narrative structure—in the form of a diary. Here too the power relations between Orient and Occident are reversed. The genius brain of professor Shanku, who is famous in the scientific world, comes up with strange inventions like element disintegrator and all curing tablet from inexpensive ingredients and also solves mysteries that range from UFOs to artificial creation of life. The scientists of the West look up to him for advice and

call for his help. However, unlike the Ghanada stories, these tales consciously draw on the indigenous spiritual and magical traditions of India and present a hybrid of science and pseudo-science. Rather than depending totally on rational justifications, Shanku stories often end on an unexplained note that leaves the reader with a sense of wonder and inexplicability. There is no doubt about the estrangement part of these stories, and if they lack the cognitive aspect in the strict sense of the word, they surely have the “cognition effect” advocated by Freedman. The anthropological background also would not allow us to dismiss the claim to cognition so easily; many of the magical components of the stories such as hypnosis and extra ordinary power achieved through yoga were part of an alternative mode of knowledge thought by many as empirically possible in the place and during the time Ray worked.

Similar to Ray’s, Shirshendu Mukhopadhyay’s science fictions play with generic boundaries. He regularly brings ghosts and other supernatural elements into his science fictions to create a universe where the line between the rational and the irrational becomes tenuous. He exploits folklores and traditions of supernatural beliefs in the suburban and rural Bengal to point towards the fact that advanced science and magic are not much different to the uninitiated. In works such as *Vuture Ghor* (The Haunted Clock, 1984), *Bony* (1990), *Patalghar* (The Underground Chamber) and *Patashgarher Jangale* (In the Forest of Patashgarh, 1989) he seamlessly blends superstitions, ghost stories and science fiction to create a unique style that at once undercuts generic conventions, and gives the impression of following them. In most of his stories the supernatural elements are not explained; but there is a definite sense that those aspects are actually natural, rather than supernatural. Science just has not progressed far enough to grasp them yet.²³

²³ This is very similar to Arthur C. Clarke’s Third Law, “Any sufficiently advanced technology is indistinguishable from magic” (36) formulated in “Hazards of Prophecy: The Failure of Imagination” in the collection *Profiles of the Future: An Enquiry into the Limits of the Possible* (1973).

These texts reflect a postcolonial society's struggle in its attempt to establish a foothold in the post war world. They present a vision of the national consciousness that is irrevocably influenced by the Occident yet is proud of its own traditions: a hybrid identity, which emerges at the intersections of culture. Such intersections, Bhabha remarks, accompanies moments of great transformations. In case of India, it was the moment of transition from a long suppressed exotic land to a structured modern nation—the moment of rapid industrialization and fast scientific development. This is a process that still lingers at various spheres of Indian society. Standing at this historic juncture these works displace the colonial relationship without completely rejecting the influence of the colonizers. Much like the colonial subject, on whom the historical forces etch their signatures, these stories open up a space where different literary conventions intersect. Although these works play around with the conventions of science fiction as it is produced in the West, they do not abjure its essence. These works are different from the texts written in more fantastic veins such as Rushdie's *Haroun and the Sea of Stories* (1990) or *Satanic Verses* (1988) or more recent works like Samit Basu's Game world trilogy (2004-07; *The Simoqin Prophecies*, *The Manticore's Secret* and *The Unwaba Revelations*), Ashoke Banker's retelling of the tales of *Ramayana*, Kalpana Swaminathan's *Ambrosia for After* (2003), Payal Dhar's *A Shadow in Eternity* (2006) and Chitra Banerjee Divakaruni's Brotherhood of Conch series as well as *The Palace of Illusion* (retelling of the *Mahabharata*, 2008). These would be more appropriately called fantasies or magic realist tales that blend Western influences with Indian myths and folklores, thus giving birth to hybrid works which abound in estrangement but care little for the cognition effect.

This is not to say that these works are in any way inferior to science fiction; rather, my intention is to indicate that the science fictions are characteristically different from these "other estranged fictions." Though a large section of science fiction writers in India will readily associate the

origin of science fiction to ancient myths and the epics *Mahabharata* and *Ramayana*, it would be more appropriate to link the new fantastic fictions to such myths and legends. In fact rather than trying to relate the above mentioned Indian English works with Anglophone Indian science fiction or science fiction of any kind, it would be a more fruitful exercise to associate them with indigenous works of similar vein. In the final analysis Hindi works such as Devki Nandan Khatri's turn of the twentieth century novel *Chandrakanta* or Mukesh Khanna's 1990s television and comic book series *Shaktiman* would not be essentially much different from English works such as Kalpana Swaminathan's *Ambrosia for After* or the comic book series *Devi* (created by Shekhar Kapur, and has among its writers Samit Basu).²⁴ Although belonging to different linguistic traditions, all these works overflow with estrangement of various kinds that do not originate from any cognitive source, and do not even create the cognition effect. These are all evidently fantasies, where anything can happen. Works like Banker's *Ramayana* tales reinvent the ancient epics for the modern times; and Basu's Gameworld trilogy creates new myths for the future. Rushdie's *Hroun* as well as *The Satanic Verses* do the same thing with myths and folk tales of the Islamic and Parsi culture. These works can be broadly defined as magic realism, fantastic fiction, or as Basu calls it "speculative fiction."²⁵ Although some writers such as Basu and Vandana Singh try to link these new Indian English works with science fiction under a broader

²⁴ There have been several science fiction series on Indian television in Hindi and other languages as well as movies. Some of the important movies in this genre are *Mr. India* (1987), *Patalghar* (2003), *Koyi Mil Gaya* (2003), *Krish* (2006) and *Love Story 2050* (2008). Satyajit Ray's movie script *Alien* was allegedly appropriated by Spielberg in *E.T.* (1983). The mentionable TV series are *Indradhanush* (1989, highly influenced by the *Back to the Future* movies), *Space City Sigma* (1986, influences of *Star Trek* and *Star Wars* are evident), *Antariksh: Ek Amar Katha* (2006). Movies and TV series based on mythology that tends towards mostly fantastical are however more abundant. In the comic book industry similar kind of blending of mythical and science fictional predominate in the super hero type titles. Most of the important titles under this genre such as Nagraj, Parmanu, Bhokal, *Devi*, and the graphic novel series *Ramayana 3392 A.D.* all blend mythological themes with futuristic elements. Science fiction themes also crop up in crime fighting comic series Chacha Chaudhary, where his giant side kick is depicted as an alien from Jupiter. However, a lot more can be said about both science fiction on film as well as in comic books that the scope of this project does not permit.

²⁵ In his blog (*Indian SFF*) on Indian science fiction and fantasy Samit Basu uses "speculative fiction" as an overarching category for fictions of estrangement.

umbrella of speculative fiction and sometime “SF/F,” Banker directly refuses to be associated with any such nomenclature.²⁶ He rather sees such literature as reinterpreting ancient archetypes in the modern context and rejects genre-boxing labels.

Although such debates over categorization and terminology are inconclusive, we cannot disregard the association between Indian science fiction and myths and legends. This relationship though differs from the relationship of myths with fantasies in a significant manner. Rather, this trend arises from the desire to foreground the Indian tradition as a scientific one—to legitimize Hinduism through the discourse of Vedic science. As previously mentioned, Dayanand Sarasvati’s reinterpretation of the *Vedas* led to the claim of India’s precedence in everything scientific the world has seen. A section of science fiction writers jumped onto these ideas to legitimize or reread the ancient myths through the lens of science. Reinterpretation of religion through science fiction though is not unique to Indian literature. A host of texts in the West engaged in that pursuit in one way or another, Arthur C. Clarke and Stanley Kubrick’s *2001: A Space Odyssey* (1968) and C.S. Lewis’s *Out of the Silent Planet* (1938) being two of the most famous examples. However, in most Indian science fictions the impetus is not to reinterpret religion or the divine, but rather to utilize and legitimize mythical elements in the modern discourse. In his study of Marathi science fiction, Harder highlights this tendency. Though he concedes that his examination of Marathi science fiction is not exhaustive, he can discern a specific pattern regarding the use of myths in science fictional context. The titles of the works he examines directly associate themselves with Hindu myths: *Samvabami Yuge Yuge* (“I Appear in Every Age”); this is a Sanskrit quotation from *Bhagavad-Gita*, *Vijnanesvari* (“Goddess of Science”;

²⁶ In response to Vandana Singh and Anil Menon’s blog discussion on Indian science fiction and fantasy, “In Search of Indian Science Fiction: A Conversation with Anil Menon,” Ashok Banker wrote: “I politely request that my name be deleted from the introductory section of this article. I object to the term ‘Indian SFF’ and to the suggestion that I engage in literary copulation with such a beast.”

from Gyanneshva's Marathi interpretation of *Bhagavad-Gita, Jnanesvari* in 1290), and *Yaksophar* ("The Gift of the Yaksha"; Yaksha's are mythical beings and guardians of wealth).²⁷ Harder claims that all these texts consciously strive to connect the science fictional actions to their mythical predecessors. What is more important though is the fact that all these stories exclusively place educated Hindus, who have the connection with the great Vedic tradition, as central characters. There is also an ever-present undertone in these works that the Indian (read Hindu) tradition should lead the world. These works, Harder argues, not only marginalize non-Hindus, but almost unconsciously posit them, especially the Muslims, as the Other against whom this educated Hindu identity can be affirmed.

In Lakshman Londhe and Chintamani Deshmukh's *Samvabami Yuge Yuge*, Purana-reading-scientist Vachaspati's effort to communicate with the alien beings, whom he takes for an incarnation of Lord Vishnu, is sabotaged by the Western world's war-mongering. In J.V. Narlikar's "Yaksophar" (the eponymous short story of the book) earth comes under an alien invasion of the "body-snatcher" kind; and a Middle Eastern computer firm's Muslim employee turns out to be the disguised alien orchestrating the invasion—a very unsubtle expression of the fear of the Other. In another story from the same collection, "Vijnan Yug mem Naradji" ("Narada in the Age of Science") Narlikar uses a Hindu mythological framework to comment on the present age.²⁸

These texts can be considered samples of the nativist trend in Indian science fiction not only for the blending of myth and science fiction, but because of a serious contemplation of Vedic knowledge

²⁷ The original title of the Marathi work by Lakshman Londhe and Chintamani Deshmukh is *Devamsi Jive Marile* (They Killed the Gods Alive), translated by Vishnu Gopal Vaidya as *Samvabami Yuge Yuge* (New Delhi, 1991). Narlikar's *Yaksophar* (a collection of short stories) is translated by Sunita Paranjape, New Delhi, 1991. Dattaprasad Dabholkar's *Vijnanesvari* is translated by Nishikant Mirajkar, New Delhi, 1991.

²⁸ We can however raise questions as to this story's legitimacy as science fiction; because Lord Vishnu and the celestial bard Narada comes straight down to present day earth from heaven to start their discourse. This should rather be seen as a satire on modern science.

as a repository of scientific truths. Engagement of a scientific figure of international renown like Jayant Vishnu Narlikar with this process further strengthens this notion. Narlikar, a world figure in astrophysics and colleague of Sir Fred Hoyle, is one of the authorities on the origin of the universe. His publications on astrophysics and other scientific matters are numerous. His fictions consequently tend to be hard science fiction, with a scientific problem constituting the core of the story. From this perspective his works can be placed in the same category as Hoyle's or Clarke's. Yet, as we have already seen Narlikar often tends to frame his stories within a Hindu mythical context. This is not only true of his short stories; in his novel *The Return of Vaman* (1989), published in English as well as in Marathi (as *Vaman Parat na Ala*), the framing device is the myth of Vaman's (an incarnation of Lord Vishnu) deception of Asura King Bali.

The story of *Vaman* is set in modern day India and the action concerns the discovery of an artifact from a prehistoric high-tech yet extinct human civilization, and creation of a robot from the data retrieved from the time capsule. Though the book incorporates the Frankenstein myth in its theme of robots destroying their masters, it is the myth of Vaman—the innocuous and benevolent appearance ruining the beholder—that controls the actions.²⁹ Narlikar's use of this myth though exposes a sinister aspect of divinity. He also introduces the question of Vedic science into the story through one of the scientists, but does not credit it at face value. Doing that probably would have undermined his scientific temperament. Still, the creation of a highly advanced prehistoric civilization with a science superior to our own is a way of going back to the theme of ancient scientific knowledge; and in spite of the claim of global status for the civilization, the discovery of the artifact in India further reinforces India's ancient lineage in science. The attempts to steal this technology by Western technology pirates

²⁹ This story is probably closer to Karel Capek's 1920 theatrical play *R.U.R.* than to *Frankenstein* in the theme of creating intelligent and self generating robots.

and Japanese corporate houses align this story with parallel claims of Hindu fundamentalists, who decry the “thievery” of knowledge by the West.³⁰

Somewhat similar treatment of traditional epistemology can be found in Narayan Sanyal’s Bengali adaptation of *2001: A Space Odyssey* as *Nakshatryaloker Devatma* (God of the starry realm; 1976). In this novel the coming together of the scientific and the supernatural occurs at a higher philosophical plane. The novel not only follows Clarke’s transcendental philosophy of science, but tempers it with Vedic epistemology. Sanyal turns Dave Bowman’s lonely voyage to Saturn (in the movie *Jupiter*) and his transformation into a “star child” assisted by a higher intelligence into Maitreyi’s (the female protagonist) journey to the ultimate knowledge of God guided by the godlike aliens and the spiritual presence of her deceased Vedantic father.³¹ Sanyal, who has a keen scientific temperament, spends the middle section of the book explaining Einstein’s theory of relativity and the possibility of faster than light travels to the extent that the book becomes a hybrid of scientific writing and science fiction. Yet, the presence of the spiritual dimension ultimately legitimizes the tradition of Hindu philosophy. This Hindu identity is reinforced by making Maitreyi’s partner, a Muslim man from Bangladesh, the betrayer of the mission—the traditional villain even in the space age.

This type of legitimization of indigenous knowledge as science has come under fire from scholars such as Meera Nanda, who outright dismisses all claims to Vedic science as backward looking and as a hindrance to progress as conceived by Enlightenment Rationalism. In *Prophets Facing Backwards* (2003) Nanda fiercely criticizes the proponents of Vedic science and the ideology of

³⁰ Yet, his later fiction depicts a shift from such position. The stories collected in the 2005 book *Tales of the Future* repeatedly present a self critical postcolonial stance. In stories such as “Death of a Megapolis” Narlikar projects the failure and corruption of the postcolonial Indian political system on the future destruction of Mumbai in an all engulfing fire, where inept civic system and people’s self interest lead to a total collapse of all support systems. Such critical attitude is more in keeping with other Anglophone Indian science fictions.

³¹ “Vedantic” in Sanskrit means scholar of the *Vedas*.

Hindutva, along with many others who subvert Enlightenment modernity.³² Nevertheless, according to many of her critics, Nanda's attack on religious fundamentalism and the use of science to propound irrational doctrines become a critique of Hinduism itself and any other ideology that deviates from Western rationalism.³³ Because Indian science fiction is a genre dealing with the futuristic aspects of a postcolonial nation and often with epistemological questions, such indigenism/hybridity debate becomes even more crucial to the creation of its imaginative universe.

As a genre that functions through thought experiments and dialectical tactics, science fiction probably is the best equipped to deal with such critical issues of science, myth, knowledge and futurity; especially, Anglophone Indian science fiction, not only because it exists on the borders of Indian and Western cultural productions, but also because it is the only tradition of science fiction accessible across the different linguistic communities in India, and thus, has the advantage of engaging in critical discourses at a larger national scale. Since its reinvention towards the end of the twentieth century it has consciously done so.

The first anthology of Indian science fiction in English, *It Happened Tomorrow*, edited by Marathi science fiction writer Bal Phondke, was published by National Book Trust under its "Popular Science" series in 1993. The book, containing both original English works and stories translated from

³² Nanda questions the scientificity of Vedic science by citing Subhash Kak and Rammohan Ray's tendency of projecting Vedic passages as coded form of scientific language. She further enquires about the scientific methodology of the ancient sages, the absence of which marks Vedic science as a form of mysticism rather than science. She also points out that the scientific tradition of Indian thought, which the Hindu Nationalists refer to, rather evolved from rationalist, skeptical and naturalist strand of Hindu philosophy to which Vedic tradition was opposed. In other words Nanda tries to evaluate claims of scientificity of a non-Western tradition through the methodology of Western rationalism.

³³ Vinay Lal in "The Tragi-Comedy of the New Indian Enlightenment: An Essay on the Jingoism of Science and the Pathology of Rationality" accuses Nanda of inflexibility and inaccuracy in her analysis of Hindutva, which is clearly different from Hinduism. Lal sees her book as rigid and Eurocentric, even to some extent Europhilic. However, despite his differences with Nanda, Lal too sees the rising fervor of Hindutva as something to be concerned about and agrees that the religious fundamentalists may at times twist the words of the proponents of an alternative epistemological tradition (such as Ashish Nandy and Vandana Shiva) to suit their own purposes. Still, the need for a better critical perspective and introspection cannot be emphasized enough while dealing with matters of such philosophical and political import.

various indigenous languages, is a landmark not only for Indian English science fiction, but for Indian science fiction in general; this is the first effort of this nature to bring the different strands of science fiction together at the national level. However, as scholars such as Amiya Dev and Aijaz Ahmad suggests, problems of translation mar many of these works. Ahmad considers English as an unsuitable vehicle for the production of the knowledge of Indian literature. But, he does so neither because it is a language inserted into the country by its old colonial masters; and nor because it implies political and cultural hegemony. He deems the English language unsuitable, because it is “among all the Indian languages, the most removed, in its structure and ambiance, from all the other Indian languages, hence least able to bridge the cultural gap between the original and the translated text” (250). This comment seems applicable to some extent to this anthology. The translations in this volume are often literal and wooden and hinder the natural flow of the stories. At certain points English fails to convey the vernacular speech patterns and cultural contexts, and thus remains unsuccessful to render the literary quality of the original works.

However, that is not the only problem that this volume has. Phondke claims in his introduction that this anthology includes works that have scientific merits in them, not works that engage in pseudo-science. The volume though ends up including mostly works that have some scientific ideas in the narrower sense and not the literary quality (with certain exceptions) that can lay claim to good literature. Yet, this book served its purpose: it provided the impetus that led to anthologies in other languages such as Ananda Publisher (2006) and Indian Publishing House’s (1998) anthologies of science fiction in Bengali that included translated works from other Indian languages. *It Happened* also foregrounds the existence and the possibilities of the genre in English that subsequently find full expression in the works of writers like Vandana Singh, Anil Menon, Priya Sarukkai Chabria and Rimi Chatterjee. Phondke’s initial call for “scientific” science fiction however has subsequently transformed

into Singh's "A Speculative Manifesto" over the last fifteen years; and as Anglophone Indian science fiction finds more international exposure, it slowly shifts away from Phondke's mould. Rather in her "Manifesto" (published in *The Woman Who Thought She Was a Planet*, 2008) Singh tries to establish a common lineage for Anglophone Indian science fiction and fantasy in myths and fairy tales by assigning the name "speculative fiction" as a broad marker for non-mimetic imaginative literature. If the manifesto lacks in theoretical and critical models, it compensates in its very effective appeal against genre-labeling of literary productions and for more attention to literature of estrangement—cognitive or otherwise.

Shifts in definitional debates of genres, however, exist in every literary culture, especially for an amorphous genre like science fiction. Yet, what is unique to Indian science fiction is the lack of a sustained magazine/journal culture during its development that could serve as a platform for such debates. Unlike Europe and America which boast burgeoning magazine cultures in science fiction and fantasy genres, India has seen only intermittent efforts (mostly in the indigenous languages).³⁴ From this perspective, Indian English science fiction developed without a common forum for exchanging ideas, with authors writing mostly in isolation. The recent years though have seen the rise of internet blogging culture and a common forum for discussion has developed in blogs maintained by various

³⁴ Though there has been no science fiction magazine in English in India, there have been several efforts in various Indian languages. According to Anish Deb, Adrish Bardhan established *Ashcharya* (Fantastic), the first science fiction magazine in Bengali, in 1963. This however lasted only six years. The two short-lived efforts that followed *Ashcharya* were *Bismay Science Fiction* (Incredible Science Fiction) and *Fantastic* (also edited by Adrish Bardhan). However, various young adult magazines such as *Anandamela*, *Sandesh*, *Shuktara* and *Kishore Bharati* as well as the premier Bengali literary magazine *Desh* often carried science fiction stories. *Kishore Bharati* deserves a special mention for its commitment to publishing science fiction throughout the year. Bal Phondke mentions *Naval*, edited by Anant Antarkar that came out in the 1960s and '70s as one of the most important periodicals to support science fiction publication in Marathi language. Other important Marathi magazines that published science fiction in its early stages are *Balmitra* and *Rahasya Ranjan*. Phondke however mentions that various magazines regularly encourage science fiction publication around Diwali. Hindi also has such instances as Bengali and Marathi with *Vigyan Katha* (Science Fiction) as its main periodical. However, with the spread of internet, online magazines have come up in Hindi and English that regularly publish science fiction and fantasy stories, Indian Science Fiction and Fantasy and IndiSF are two such examples.

authors.³⁵ In these blogs authors, critics and fans join in well informed discussions about thematic and generic issues, which can often rival academic conferences. In these discussions an effort is evident in making the genre more visible and giving it a proper direction. These discussions also show that the genre has developed since the publication of *It Happened* in the early nineties in its treatment of social issues.

The stories included in *It Happened* focus mostly on hardcore scientific problems such as ecology (“The Ice Age Cometh” by J.V. Narlikar), nuclear warfare (“A Journey into Darkness” by Subodh Jawadekar), time travel (“Time” by Shirshendu Mukhopadhyay), genetics (“An Encounter with God” by Debabrata Dash), artificial intelligence (“Ruby” by Arun Mande), and the social dilemmas such issues spawn. Other works that were published around this time also show similar attention to hard science: Narlikar’s *Vaman*, Mathew Panamkat’s *Lusooma* (1992), R. N. Sharma’s stories in *The Embroidered Newspaper* (1994) etc. These works are in a sense similar to the works in 1940s and ’50s American science fiction. Most of the stories in *It Happened*, however, do not go beyond the obvious, to the subtler issues of race, class, caste and gender—problems so much pertinent to the postcolonial nation—which cannot be said to be true of all the other works of contemporary science fiction. Texts such as Boman Desai’s *The Memory of Elephants* (1988) definitely shows more interest in the society than in hard science and some stories of Sharma follow in similar vein.

In fact, Anglophone Indian science fictions that came out around and after *It Happened* invest their attention primarily to the subtleties of these social matters. However, similar to the indigenous language texts these works invariably join into the purity/hybridity debate, which ultimately corresponds to the dialectical tendency that marks Indian science fiction as a whole. All the major texts

³⁵ In the context of Anglophone Indian science fiction, the blogs maintained by Vandana Singh, Samit Basu, Ashok Banker and Amardeep Singh among many others regularly play host to well informed discussion on science fiction and fantasy.

published since the mid-nineties participate in this debate. Rimi Chatterjee's *Signal Red* (discussed in detail in Chapter II) criticizes the discourse of purity that an exclusively indigenist philosophy leads to. This book rather underpins the hybrid nature of the nation and knowledge, and tries to find a mitigating factor, which may help India avoid a dystopic future under a totalitarian Hindu government. The responses to purity/hybridity and indigenous/foreign debate in Anglophone Indian science fiction are however not limited to pro or contra stances. The issues involved are often beyond any for/against dualism. Amitav Ghosh's *The Calcutta Chromosome* (discussed in detail in Chapter II), which received the Arthur C. Clarke Award for the best novel in 1997, sets down a scenario where the importance and the success of indigenous knowledge and tradition is intertwined inseparably with foreign intervention, and vice versa. In fact, Ghosh's novel deals with subaltern knowledge—knowledge possessed by the social outcasts and practiced in secret, knowledge that are never acknowledged as such—not with the great ancient tradition. This book gleans from the local folklores and rumors, not from the canonical *Vedas*. A similar theme can be seen in Sukanya Datta's linking of ancient Egyptian slaves to the reclusive Indian Ditinga tribe in "Severed Link." The resistance of these subaltern classes is highlighted through the Ditinga's secrecy and closely guarded medical knowledge from which modern scientists are totally excluded.

Although *The Calcutta Chromosome* can be seen as a pioneering effort in the discourse of hybridity in Anglophone Indian science fiction and also rejuvenating the whole genre in the 1990s, it is not alone in this endorsement. Desai's overlapping realities and merging histories in *The Memory of Elephants* also highlight this multicultural and multigeneric quality of Anglophone Indian science fiction writing. In more recent works such multiculturalism has become the norm. In texts such as Manjula Padmanabhan's *Harvest* (1997), "Gandhi-Toxin" (1997) and "2099" (1999), Ruchir Joshi's *The Last Jet-Engine Laugh* (2001), Ven Begamudre's "Out of Sync" (2004), Vandana Singh's *Of Love*

and *Other Monsters* (2007), *Distances* (2008) and *The Woman Who Thought She Was a Planet* (2008, a short story collection), Sukanya Datta's "Completely Catwoman" (2008), Priya Sarukkai Chabria's *Generation 14* (2008) and Anil Menon's *The Beast with Nine Billion Feet* (2009) multiculturalism is almost taken for granted.³⁶

Joshi's *The Last Jet-Engine Laugh* (explored in further detail in Chapter II) does not even explicitly raise the debate. The tension between hybridity and indigenism is seen as a fact, not an issue of debate. In its quasi-dystopian future India hybridity in all aspects of the national life is such a common occurrence that the efforts of purity-mongers are depicted only as skin-deep. Joshi's use of Rushdie-like "chutney" English—incorporating Bengali, Hindi, Gujarati, French and German words effortlessly—makes this novel a product of the global culture and, by extension, globalized economy.³⁷ This Western dystopian trend, towards which Joshi's novel drifts, is also manifested to an even greater degree in Sarukkai Chabria's *Generation 14* (detailed analysis in Chapter II). The novel is set in a far future "Global Community" where all human uniqueness is lost through the process of cloning. This world, despite of all its opulence and technological superiority, reminds one of the sinister aspects of *1984* through suppression of individuality and emotion, and eradicating any references to past that contradicts the image of the authorities. Hybridity in this book is intrinsic—it is at once the threat and

³⁶ Salman Rushdie's subtle use of alternative history in *The Ground beneath Her Feet* (1999) also technically makes it a science fiction. This book too highlights the multiplicity in the postcolonial Indian culture and existence of multiple possibilities.

³⁷ Another result of globalization can be observed in Padmanabhan's theatrical play *Harvest*. The author claims in a note to the book "For the sake of coherence this play is set in Bombay [. . .]. Ideally, however the Donors and Receivers should take on the identities, names, costumes and accents most suited to the location of the production" (1). *Harvest*, which won the Onassis International Cultural Competition Prize for Theatrical Plays in 1997, depicts a savage world of "haves and have-nots." In the globalized market of this play's universe the "third world" literally becomes the harvesting ground for "first-world," not only in material productions but also in human body parts. Poor men are bought and sold by wealthy North-Americans for their body organs—until everything is taken away and the Receiver *becomes* the Donor. Not only does this play depict the hybridity of identity in the postmodern world through biological and cybernetic transference, the claim that this play has nothing intrinsically Indian in it points to the spread of global capitalism that ultimately flattens out all the differences into a simple binary of buyers and sellers.

the salvation. Although it works through similar themes of biotechnology and cloning, Menon's *The Beast with Nine Billion Feet* does not exude the amount of pessimism as Sarukkai Chabria's book. However, Menon's skeptical attitude about corporatization of science and threat to traditional Indian life in the high-tech India of the future gives this novel a self-critical perspective.

Both Joshi and Sarukkai Chabria imagine the future in pessimistic ways. But none advocates the renunciation of progress towards a techno-scientific prospect. They along with Menon roughly follow the pattern of disillusionment with the postcolonial world discerned by Ralph Pordzik in his *The Quest for Postcolonial Utopia*, but they also articulate the postcolonial country's hopes and fears as advocated by Uppinder Mehan in his manifesto for postcolonial science fiction in *So Long Been Dreaming*. In his manifesto ("Final Thoughts") he urges the postcolonial authors to engage in the discourse of the future of their nations through futuristic/science fictional writings, or, he warns, that future would be written by someone else. These articulations, though predominantly critical due to the various challenges and disillusionments faced by the newborn nations, are not always negative.

Vandana Singh's works, both shorter and longer, reflect this critical yet optimistic outlook. Like many other writers of non-mimetic fiction she writes science fiction as well as works that can be considered magic realist or fantasy. But irrespective of their generic markers, her tales display a fine balance between hope and despair, between fear and joy. Her science fiction works such as "Delhi," "Infinites," "Conservation Laws," "Three Tales from Sky River," "The Tetrahedron" (all collected in *The Woman Who Thought She Was a Planet*) and *Of Love and Other Monsters* all display this tension through spatio-temporal estrangements. Yet, all these stories are firmly rooted in today's social realities; realities that prompt these displacements. Border line cases like "The Woman Who Thought She Was a Planet" and "Hunger" use the very idea of estrangement to call the reader's attention to the

problems of our mundane world—traditional gender roles, domesticity, conjugality, social prestige, everyday love and boredom; issues that never call our attention because they are mundane. Her fantasies work in similar manner. Yet for all their estrangements these stories are markedly Indian and deal with the postcolonial nation's struggle to come to terms with problems of religion, race, class and gender—problems that are personal and petty yet are of immense import. Somewhat similar concerns with interactions between the West and the East can be seen in Sukanya Datta's stories in *Beyond the Blue* (2008). Works such as "Future Perfect" and "Completely Catwoman" calls attention to aspirations of middle and higher class protagonists and how the society is driving full speed towards an amalgamation of Western materialism and traditional Indian family values, while "Heir Apparent" presents the dilemma between Western style scientificity and traditional beliefs in miracles and curses of the newly educated rural Indian population.

Yet, hard science is also present in both Datta and Singh's writing. While Datta speculates about the cosmic origin of life and auto-defense mutation in the Earth's flora in such works as "Déjà Vu" and "Modern Neelkanths," Singh meditates on complex multidimensional mathematics in "Tetrahedron," "Infinities" and most notably in her latest novella *Distances* (discussed in Chapter II in detail). However, all these works advocate cultural transactions and acceptance of differences through complicated scientific tropes.

This is especially true for *Distances*. On the one hand this novella depicts and advocates assimilation of different cultures, and on the other, it warns of the danger of losing one's own identity in the assimilated culture. This work, which is reminiscent of Ursula K. Le Guin's *The Left Hand of Darkness* (1969) and *The Dispossessed* (1974) in its myth making prowess and its bold expression of multiple sexual modes, suggests the restructuring of social relations with every technological advance.

Distances along with Sarukkai Chabria's *Generation 14* also reflect a slow movement away from indo-centric futurism evident in most Anglophone Indian science fiction. These works rather signal a new postnationalist stage in Anglophone Indian science fiction, which, in spite of retaining its Indian qualities, shows interest in issues pertaining to a broader humanity.³⁸

Ven Begamudre's "Out of Sync," collected in *So Long Been Dreaming*, uses a similar technique by setting the story in an off-world human colony. In fact, a quick survey of the anthology would show that this commitment to multiplicity and advocacy of liberal acceptance is a trend not only of Indian science fiction, but of postcolonial science fiction in general. This claim can be aptly supported by pointing towards works by such postcolonial writers as Nalo Hopkinson, Nisi Shawl, Andrea Hairston, Greg van Eekhout, Nnedi Okorafor-Mbachu or Tobias S. Buckell. Begamudre's story uses references to Hinduism and draws on a mythical structure to advocate understanding and acceptance of difference—a goal championed by postcolonial scholars of all creed and color.

From the early 1990s to 2010 the development in Anglophone Indian science fiction is visible not only in qualitative and thematic aspects but also in the writers themselves. Science fiction is being taken up more and more by the writers of Indian diaspora and mainstream writers as their medium of expression. The shift of gender composition is also obvious. While in *It Happened* no work by women was included, some of the most promising practitioners of contemporary Indian English science fiction

³⁸ Although such works as *The End of Creator* (2005) by Shekhar Khanduja and *Passion's Creation Novel Trilogy: A Vision of the 21st Century* (1997) by Anand and Ranu Khare also do not show an indo-centric point of view, it is very difficult to consider both these works as science fiction proper. While Khanduja starts with an American character and goes on an epic quest through the universe, the Khares set their novels (*Strange Powers*, *Gates of Time* and *Princess Takhmina*) in totally fantastic realms. Although Khanduja's book shows traces of cognition effect, its infantile mimicking of Western works such as Douglas Adams' *The Hitchhiker's Guide to the Galaxy* and the *Star Wars* movies, and conceptual immaturity at best put it in the category akin to the Gernsbeckian pulps. The Khares' work however presents a different problem. Although praised by various scholars for its poetic quality, the trilogy stands as bad science fiction. Only the first novel in the trilogy comes even close to being a science fiction, the rest being abstract musings on human passions. Although rich in linguistic flare, these works lack in conceptual clarity, the weakest part being its futuristic technology embodied in an emotional computer. The European named protagonists also somehow look out of place in this fantastic universe. It seems the authors use European names because they are writing in English.

now are women. Along with Singh, Sukanya Datta, Manjula Padmanabhan, Priya Sarukkai Chabria and Rimi B. Chatterjee are some of the most accomplished writers the genre has ever seen. Gender issues are also emerging as central to Anglophone Indian science fiction and fantasy. While *It Happened* contains works where gender issues are minimal, *The Woman Who Thought She Was a Planet* includes stories that deal mostly with issues of women and the roles that they are supposed to play in the Indian society. In the same way Sarukkai Chabria's *Generation 14*, Ghosh's *The Calcutta Chromosome*, Chatterjee's *Signal Red* all take up issues pertinent to gender roles in the Indian society. There has not been dearth of women writers in Indian English literature with Nayantara Sahgal, Anita Desai, Bharati Mukherjee, Arundhati Roy and Jhumpa Lahiri gracing the field. But barring Rokeya Shekhawatt Hussain in the early twentieth century, only recently have women come into the arena of science fiction writing.

The situation in the indigenous languages is not much different either. Although Indian science fiction did not express the macho misogynous attitude associated with early form of Western science fiction, it was still an exclusively male realm. The biggest reason behind this was the pattern of education prevalent in the Indian society. The men are usually encouraged to get into scientific studies, while women are expected to get into the fields requiring "less analytical skills," such as history, literature and other social studies. However, with more and more women turning their attention to scientific studies and coming out of their traditional safe house of liberal arts, it was only a matter of time that the gender composition changed.

Although Anglophone Indian science fiction emerged as one of the earliest forms of Indian English writing, it is the latest trend in the Indian literary community. This genre shows great potential for dialectic discussion for which postcolonial literature always strives. The rise of postcolonial science

fiction in the publishing sector and its increased visibility in academic publications and conferences suggest that an increased awareness of the genre is spreading not only among the readers but also among the writers, who are now tapping into its critical propensity to imagine the future of the newly independent nations. They all draw upon the Western tradition of science fiction yet bend them in different manners. Indian science fiction similarly follows this general pattern. Nonetheless, Indian science fiction also displays a further form of dialectic—that between its indigenous “Great Tradition” and the tendency to subvert its authority. Anglophone Indian science fiction resides at the very center of this double dialectics that makes it one of the most critically potent genres—both in science fiction as well as in postcolonial literature. These critical devices also contribute in the creation of futuristic discourses that shift the focus of mainstream Indian postcolonial literature from narrating the past and the present to speculating about the future of the nation. The next chapter closely examines the construction of such futuristic discourses in six Anglophone Indian science fiction texts and unravels the pattern of this new postcolonial dialogue.

CHAPTER II

MAPPING TOMORROWS: FUTURISTIC DISCOURSES IN ANGLOPHONE INDIAN SCIENCE FICTION

Silent Subversion: Counter-Science and Subaltern Discourse in *The Calcutta Chromosome*³⁹

Amitav Ghosh's *The Calcutta Chromosome* (1996) challenges the legitimacy of Western science, tries to foreground the silent subaltern "texts" and in the process sets the conventions of science fiction into play. Ghosh rewrites the history of Ronald Ross's discovery of the malaria vector by exploiting its "slippages," reorients the reader's epistemological reference by placing silence and secrecy as vehicles of knowledge and power and twists the genre of science fiction by bringing in the elements of supernatural. This postcolonial science fiction challenges the hegemony of West by questioning the basic assumptions of Western knowledge. Yet, the importance and the success of indigenous Indian knowledge and tradition in this book are intertwined with foreign interventions, and vice versa. The alternative epistemology that this book presents is subaltern knowledge—knowledge possessed by the social outcasts and practiced in secret, knowledge that are never acknowledged as such—not the great ancient Vedic tradition. Thus *The Calcutta Chromosome* not only subverts the Western normativity by empowering a native secret cult with their practice of counter science, but it also subverts the established Brahminical elite knowledge. In doing so the novel ends up endorsing hybridity in all forms—epistemological, philosophical and physical. This radical socio-political stance speculates about a new form of subaltern discourse and projects it as a viable method of subverting neo-Imperialist prerogatives of the West as well as of the indigenous elites.

³⁹ A version of the essay is forthcoming in the anthology *Science Fiction, Imperialism, and the Third World: Essays in Literature and Film* (McFarland) as "*The Calcutta Chromosome: A Novel of Silence, Slippage and Subversion.*"

Ghosh addresses the question of the subaltern's access to power raised by the postcolonial scholar Gayatri Chakravorty Spivak in this book through the employment of the estrangement mechanism of the science fiction genre. He foregrounds the binaries that mark colonial discourse, and challenges the hegemony by subtly reorienting the manner in which these binaries are conceived. He utilizes the silence ascribed to the subaltern in the colonial discourse to propose an alternative order: an order that exists despite the suppression of voices, or, in fact, as the book shows, because of the invisibility and inaudibility rendered by such suppression. Thus, his central thesis of the book becomes: power of the subaltern rests in silence and secrecy. The use of literal metaphors such as transmigration of personal characteristics and free association of supernatural occurrences and counter-scientific non-communication that excludes the dominant class with a scientific methodology and secret knowledge construct such a subversive postcolonial discourse.

Ghosh employs a Derridian approach to expose the binaries of power, where the first term is dominant in the "normative" colonial discourse—white/black, European/Indian, West/East, reason/faith, science/counter-science, male/female, utterance/silence, evidence/belief. These binaries work as devices of domination of the Others for the white, European, colonial, male order. Donna Haraway uses a similar approach in "A Manifesto for Cyborgs" in proposing an alternative feminist order. She claims that in the fragmentary postmodern existence the myth of an organic wholeness, to which these dualisms lead to, is inapplicable. She explains that such myths are social constructs, as are the social identities of human beings. She deconstructs such myths by marking them as devices of domination used by the patriarchal, Christian and by extension capitalist society. Haraway points out that marginalized entities should operate on the principle of affinity rather than on some essential identity.

This center/margin dichotomy also informs the central focus of *The Calcutta Chromosome*. The novel deals with a host of peripheral groups—refugees, immigrants, natives of colonial India, people from lower castes, spiritualists and women. Ghosh presents them as subaltern entities that exist in a world alternate to the dominant colonial and imperial principles of the West. He deliberately sets these peripheries up against the dominant center to demonstrate their apparent vulnerability. But in *The Calcutta Chromosome* these marginalities thrive by the very exclusiveness of their existence. Their lack of presence in the colonial discourse is essential to their existence. In this context Spivak’s question, “Can the subaltern speak?” becomes pertinent.

In “Can the Subaltern Speak?” Spivak raised the issue of the subaltern’s access to voice in the colonialist/imperialist power structure. Her original answer to the problem was negative. Though in the later revisions of the essay that stance changes into something more optimistic, her main contention that even the best of the intentions can end up having an adverse effect in articulating the unheard voices remains true. She cites the example of “the white man’s burden”: the well intentioned white man with a mission to “civilize” the darkest corners of earth ends up as the oppressor. Spivak brings in Foucault’s concept of “epistemic violence” to support her doubts about the feasibility of a discourse that would allow the subaltern to speak. She quotes Foucault in arguing that this “epistemic violence” ends up privileging the imperial narrative as the “normative one”:

Perhaps it is no more than to ask that the subtext of the palimpsestic narrative of imperialism be recognized as “subjugated knowledge,” “a whole set of knowledges that have been disqualified as inadequate to their task or insufficiently elaborated: naïve knowledges, located low down on the hierarchy, beneath the required level of cognition or scientificity.” (2197)

This colonial/imperial discourse is constantly being challenged by postcolonial scholars, especially by the Subaltern Studies Group led by Ranajit Guha. According to Spivak they are working not to give the

subaltern a voice, but to clear out a space from where the subaltern can speak.⁴⁰ She, however, recognizes the ambiguous relationship in which the subaltern stands to power: at once subordinate and dissenting, outside the ideational act of the colonial discourse as well as outside the scope of colonial language. In other words, the silence and invisibility are the two preconditions for the existence of the subaltern; thus the subaltern cannot speak, or can do so only in an indirect manner.

In *The Calcutta Chromosome* Ghosh uses silence and invisibility as the weapons/instruments through which he deconstructs the colonial “normative” narrative of the “enlightened” Europeans. The colonial narrative that *The Calcutta Chromosome* follows is Ronald Ross’s discovery of the malaria parasite.⁴¹ Ross’s discovery is one of the pillars of colonial scientific discourse. It is a discourse that at once asserts the supremacy of science as well as the supremacy of the white man against the unyielding colonial space and feminized nature. The epigraph of the book, which is a 1902 poem written by Ross on his finding the malaria parasite, foregrounds this supremacy:

This day relenting God
Hath placed within my hand
A wondrous thing; and God
Be Praised. At His Command,

Seeking His Secret deeds
With tears and toiling breath,
I find thy cunning seeds,
O million-murdering Death.

Ross attributes the discovery to *his* “toil” and *God’s* “command” and grace. This draws a clear battle line between the white man and the hostile nature (“million-murdering death”) which the white man must fight with the aid of *his* God in order to carry out his “burden” of “civilizing” the ignorant

⁴⁰ But, Spivak is also more bent on exploring the possibilities of uttering the heterogeneity of the colonized subject than the Gramscian interpretation of the term would normally allow.

⁴¹ Sir Ronald Ross (1857-1932), an Anglo-Indian physician, received the Nobel Prize for medicine in 1902 for discovering the life cycle of the malaria parasite Plasmodium. During the final phase of his work he was in Kolkata (Calcutta).

natives, to bring to them the light of science and reason. Any reference to the colonized space, where this battle takes place has been written out, or at least any positive agency has been taken away from it. Ross's obsession with the sole authority over his discovery can also be seen in his *Memoirs* (1923) published more than twenty years after he received the Nobel Prize for medicine in 1902. The only available history of his research is written by Ross himself. In "Postcolonial Science Fiction: Amitav Ghosh's *The Calcutta Chromosome*" Claire Chambers mentions that Ross's *Memoirs* is highly selective and he tries to exercise full control over the "history" of his experiment. As Murugan (the eccentric malaria historian in the novel) claims, Ross "wants everyone to know the story like he's going to tell it" (52). Chambers also cites Ross's biographers Edwin R. Nye and Mary E. Gibson to support her claim of the dubiousness of the *Memoirs*.⁴²

In *The Calcutta Chromosome* Ghosh draws liberally from Ross's *Memoirs*, but he uses it to find slippages that lend themselves to the re-inscription of the history that Ross tried so hard to control. The process of deconstruction starts off with identifying Ross's native assistant, Lutchman, as the subaltern who has been silenced totally in Ross's account of the malaria discovery. Chambers points out that in his memoir Ross talks about Lutchman only in passing; he is never shown as having any influence in the outcome of Ross's research; at least there is no "evidence" of that. However, in the

⁴² On the matter of this controlling methodology of history Chambers says: "Ross tried to steer the course of his own posthumous reputation as a lone genius by keeping a tight control over those documents that would be preserved for posterity" (7). Chambers cites Ross's biographers, Edwin R. Nye and Mary E. Gibson to support her argument:

One thing that stands out in assessing Ross's view of his own self worth was the fact that he kept everything. He kept letters sent to him, apart from family ones, and whenever he could he got back his own letters from people. He kept cuttings, telegrams, copies of articles and so on. The Ross Archives, distributed between London and Glasgow, comprise about 30,000 catalogued items, all of which he carefully saved for posterity. (7)

Chambers further indicates that,

Ross's obsessive collection of documentary evidence about himself, and his choice of what would be retained and what omitted for posterity bears an uncanny resemblance to the novel's portrayal of the International Water Council, which keeps an astonishing amount of its own documentation and trivia in order to direct the way in which its history is interpreted, or as Ghosh puts it, "to load the dirt with their own meanings." (7)

novel Murugan claims that the very lack of evidence is the kind of proof that can discredit the history written down by Ross: “secrecy is what this is all about: it figures there wouldn’t be any evidence or proof” (104). As we trace down Lutchman’s story we find Mangala, the native woman, working as a sweeper at Cunningham’s (another British scientist) laboratory in Calcutta. She also turns out to be the leader of the subaltern group that is searching for immortality by using malaria parasite as a medium of conveying human personality—the “interpersonal transference.” The progress from authority to subalternity is clearly marked, and what lies in the margins of or excluded from the colonial history reclaims the center in the postcolonial story. This reclamation is subtle and silent; visible only to the discerning eye. Ghosh plays on the binaries of Western colonialism and flips them over. Control gives way to chaos; written history gives way to rumor; and at the heart of the story a British colonial scientist’s research leads to a syphilitic native woman’s quest for immortality. But this flipping over is not a sudden empowerment of the subjugated half within the same structure of knowledge; in *The Calcutta Chromosome* the reader is epistemologically re-oriented. Murugan explains to Antar (the Egyptian immigrant around whom the present action of the narrative revolves) the mode of operation of the secret sect behind Ross’s discovery:

You all know matter and antimatter, right? And rooms and anterooms and Christ and Antichrist and so on? Now, let’s say there was something like science and counter-science. Thinking of it in the abstract, wouldn’t you say that the first principle of a functioning counter-science would have to be secrecy? [. . .] It would have to use secrecy as a technique or procedure. It 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. (105)

This claim against knowledge is not a claim to ignorance. Rather it is a refusal to communicate the knowledge in the conventional manner. Spivak mentions in her essay that speaking is an act involving two components—verbal and auditory. Absence of a listener forecloses the possibility of the act of speaking. The subaltern’s location outside the capitalist colonial/imperial discourse prevents its

speaking; hence prevents it from any direct act of communication. In *The Calcutta Chromosome* the subaltern disclaims knowledge in the sense that this knowledge is not “knowledge” in the conventional normative discourse. The colonizer by definition is excluded from this knowledge, because the subaltern is a subject position that the colonizer can never assume.

In the novel, Ross works on the malaria project without any suspicion of the existence of a secret observer. However, Murugan is certain that a secret group of natives have guided Ross in his efforts at every step, without him ever knowing. In fact Ross is embedded too much in the colonial ideology to be able to listen to the whispering voices around him. Grigson, the linguist, who comes to visit Ross’s first laboratory in Secunderabad, pays attention to language of the natives despite belonging to the same ideological position as Ross and discerns an air of mystery all-around. But he is frightened away from his investigations by Lutchman, when he takes Grigson for a ghostly chase along the railway tracks at night, in which Grigson almost gets killed. Cunningham, the doctor in whose laboratory in Calcutta Ross ultimately comes to work, is also blind to the subversive activities that take place around him. However, as his presence becomes an impediment to the furthering of the subaltern “knowledge,” he is made to flee Calcutta by methods inexplicable to the rational mind. Elijah Farley is the only white man who sees the procedure through which Mangala (the leader of the cult of silence and a figure much like a demigoddess, who lives an immortal life through different incarnations, to her followers) performs her rituals and discovers the extent of the subaltern “knowledge.” However, his threat to violate the cult’s silence and secret knowledge leads to his disappearance and possibly his death at Renupur.

Countess Pongracz, the Hungarian psychic who later became an archeologist, recorded the supernatural occurrences with C.C. Dunn (probably Cunningham in disguise), which revealed the power of the cult of silence. She too disappears while looking for the shrine of silence in Egypt. She

works as a connection between Egypt and India (two ancient non-Western civilizations colonized by the West) that creates another unexplained subtext of the novel. Her disappearance during a search for the shrine of silence suggests that there is a link between this shrine in Egypt and the cult in India, which prefers to stay undetected and off the record. This refusal to be discovered suggests the existence of a similar subaltern resistance to Western modes of domination among the colonized people all over the world. This may also suggest a secretive method of association among such resistances, which is absolutely different from the Western mode of communication network epitomized in the novel by the supercomputer Ava and the minute record keeping of the International Water Council that combs the world for the last bit of information.

Such resistance to discovery is also seen in the fate of Murugan, who tries to grasp this non-Western mode of counter-scientific knowledge through a Western scientific methodology of gathering of evidences (or non-evidences). He ends up in an asylum—lost for all practical purposes to the corporate house that employed him. Phulboni, the famous Bengali writer who had a brush with this cult of silence in his youth, also plays a similar role trying to “know” the secret that eludes him throughout his life. He begs the Mistress of Silence (probably refers to Mangala) to accept him in her folds (much like Murugan does towards the end of the story): “I beg you, I beg you, if you exist at all, and I have never for a moment doubted it—give me a sign of your presence, do not forget me, take me with you [. . .]” (125). It seems that not only are the colonizers excluded from this silence but also any voice that can utter the secret into words. Such total refusal to engage into any form of “scientific” discourse probably points at the subalternity of the cult. After all, subaltern is a subject position that cannot be assumed or understood, not, at least, in the ordinary sense of the term, by the people vested with power—Western or Indian. Thus, in *The Calcutta Chromosome* anyone from the echelons of power, who truly understands the subaltern cult, becomes embedded into that subject position and

disappears (sometimes literally and sometimes metaphorically) from the world of power politics. The moment of their discovery—the moment the functioning of the cult is revealed to them—is also the moment of their final recognition by the cult, and thus, the moment of their interpellation into subalternity.

For this counter-science group, to know something is to initiate change about that very thing.⁴³ As Murugan puts it: “[. . .] just suppose you believed that to know something is to change it, it would follow, wouldn’t it, that to make something known would be one way of effecting a change? Or creating a mutation, if you like” (217). But this act of knowing must be performed not in the manner of direct communication but through real acts of discovery by the completely unaware subject—like Ross, like Urmila, like Antar. The inscrutability or the lack of knowledge must be present all the time for the person who must perform the act of knowing for the change or mutation to take place. Murugan first explains to Urmila, the young woman who, along with her mentor Sonali, helps Murugan in his investigation about the cult of silence and who at the end of the book becomes Mangala’s latest incarnation:

Fact is we’re dealing with a crowd for whom silence is a religion. We don’t even know what we don’t know. We don’t know who’s in this and who’s not . . . We don’t know how many of the threads they want us to pull together and how many they want to keep hanging for whoever comes next. (218)

Later talking about the Mistress of Silence he further reveals:

She wants to be the mind that sets things in motion. The way she sees it, we can’t ever know her, or her motives, or anything else about her: the experiment won’t work unless the reasons for it are utterly inscrutable to us, as unknowable as a disease. But at the same time she’s got to try and tell us about her own history: that’s part of the experiment too. (253)

⁴³ In *In an Antique Land* (1992) too Ghosh constructs a similar scenario where the presence of the subaltern slave is traced through the narrative of his master. Interestingly this book too deals with the theme of an unexplored link between Egypt and India, the two ancient civilizations of the East, like *The Calcutta Chromosome*.

However, this experiment of “telling her own history” is unlike Ross’s version of the history. Her history can only be told through patches, through scraps of stories, through folklores, through subtle hints left for the attentive observer to pick up, through rumors and through unrecorded memory of the subaltern.

Ghosh pits the two very unlikely competing narratives against each other. On the one hand is Ross’s version of the history of the malaria experiment asserting its authenticity through recorded evidence, stifling any competing voice. On the other hand is Mangala’s story, which constantly mystifies its own reality through rumors and rituals, silencing any utterance that exposes or threatens to expose its existence. One protagonist is a colonial British military officer and a renowned scientist. The other is not only an oppressed native but also a woman belonging to the lowest social stratum. What they have in common is Lutchman or Laakhan. He acts as assistant to both of them: first to Mangala and then to Ross. In fact whatever trace is left of this “other experiment” in Ross’s narrative is the mention of Lutchman. We don’t have any mention of Mangala anywhere in the “factual history” of the novel except in Farley’s uncataloged letter to Dr. Manson, which mysteriously disappears from the library when Murugan tries to photocopy it. The vestiges of Mangala’s presence, or rather Mangala-Bibi’s (that’s how she is known to her initiates) presence, can be found only in the rituals and secret practices of the people who don’t have any voice in the world of power—neither in colonial India, nor in the free country. Her history is communicated indirectly, as Phulboni puts it: “I see signs of her presence everywhere I go, in images, words, glances, but only signs, nothing more [. . .]” (124). In fact Murugan and Phulboni, the two characters caught between the pulls of East and West, act as the mediums through whom the Mistress of Silence “speaks” her history. Her purpose though remains beyond the ken of both the mediums. This inscrutability presents its final face at the end of the novel, when Antar, the Egyptian immigrant in New York, discovers the existence of the cult and

simultaneously he is also “discovered” by the cult as the new subject for reincarnation. However, it remains a mystery if he is the person chosen for “interpersonal transference” or if he is the receiver for someone else’s “Calcutta Chromosome.” Antar is also probably the only survivor of a malaria epidemic in the small Egyptian hamlet that Countess Pongracz was searching for at the time of her disappearance. This ties together the Egyptian shrine of silence, the Indian cult and Antar as a twenty-first century subaltern subject. His orphan origin and oppressed existence also makes him very similar to Laakhan. Along with this, frequent bouts of malaria associates him with the cult’s modus operandi, and makes him a suitable subject for inclusion into the folds of the cult of silence.

It can be argued that Phulboni, Murugan, and Antar, even Farley, are in a certain sense subaltern—the subaltern who cannot be heard even if it speaks. Nobody can really hear what these characters have to say. The transplantation of the whole cult to New York, the metropolitan space, from the postcolonial space, India, also suggests an interrogation of subaltern identity formation. The new subaltern does not belong to only a colonizer/colonized relationship, but to the invisible power of the new corporate empires, where Antar loses his job and is monitored by a computer. The transference of the location of the metropolis from England to America also hints at a new world order and new power relations in imperial politics and, in a way, re-inscribes the notion of normative power structure. Murugan’s metamorphoses from the employee of an multinational organization, sending papers to scientific journals, to an inmate of an asylum, telling delirious stories is also a transformation into subalterity. The Western world is deaf to his voice. Only Antar can hear him, because he himself belongs to this new oppressed class.

Conversely, one may argue that Mangala and Lutchman in a certain sense transcends subalternity by having access to power over others, which the Spivakian subaltern cannot possess. But here Ghosh moves away from Spivak by positing that the very conditions that apparently make the

subaltern vulnerable hide its source of power. This unique notion of power debunks the conventional normative concept. Rather, it exposes the way counter hegemonic mechanism can work—by hiding within and exploiting the weaknesses of the dominant ideology. Under this form of discourse, the dominant class cannot learn the activities of the subaltern class, because the dominant class does not pay attention to the subaltern class. Thus the hegemonic class that relies on knowledge and communication is totally vulnerable against this invisibility and silence.⁴⁴

Similar issues are raised in other postcolonial science fictions like Nisi Shawl’s “Deep End,” Andrea Hairston’s “Griots of the Galaxy,” and especially in Ven Begamudré’s “Out of Sync” (all anthologized in *So Long Been Dreaming: Postcolonial Science Fiction and Fantasy*). “Out of Sync” like *The Calcutta Chromosome* creates a discourse of subalternity and silence in an off-world human settlement, where the colonizing humans are constantly threatened by the inscrutability of the subjugated natives of the planet, the “Khonds,” or their ancestors, the “Ah-Devasis.”⁴⁵ Though the text ultimately suggests a contact between the two races through the crossbreed race “Demi” (half human, half Khond), the constant presence of some unutterable power, which resides outside the discourse of colonialism, permeates the story till the end.⁴⁶ Sukanya Datta’s “Severed Link” displays an even closer

⁴⁴ This situation is somewhat similar to the 1999 David Fincher film *Fight Club* (adapted from Chuck Palahniuk’s 1996 novel of the same name), where the ordinary working men create an underground organization to vent male aggression and disturb the order of the society through their violent subversive action. The rule number one of the fight club is that the members don’t talk about fight club. Thus, it exists and thrives through the anonymity of the members. While forcing the police chief to call off a search for the club members Tyler Durden (played by Brad Pitt) says:

You're going to call off your rigorous investigation. You're going to publicly state that there is no underground group. Or... these guys are going to take your balls. They're going to send one to the New York Times, one to the LA Times press-release style. Look, the people you are after are the people you depend on. We cook your meals, we haul your trash, we connect your calls, we drive your ambulances. We guard you while you sleep. Do not... fuck with us. (IMDB)

⁴⁵ “Ahdivasi” means native in Sanskrit.

⁴⁶ The association of the name “Demi”—the prefix assigning an “almost-ness”—should not be lost. They are almost human, but not quite. This is a classic example of Bhabha’s “mimic men,” who are neither natives and nor the colonizers, belonging to both and none.

resemblance to Ghosh's text in its exploration of subaltern knowledge. This story displays the inability of the modern day Indian scientists to pry out the secret medicinal knowledge of the nomadic Ditinga tribe, who barely participate in the normative social discourse. Similar to *The Calcutta Chromosome*, Datta's text draws a subtle connection between the ancient Egyptian slaves and the Ditinga through their secret knowledge of plants, manifested through pottery design and their unique symbolical representation of grass, which is totally lost on the "scientific" explorers of modern civilization, Indian and Egyptian. Such discourses of subversion and nonconformity indicate the devious and indirect ways that subalterns resist social hegemony.

However, *The Calcutta Chromosome* also questions the conventional power structure in the sense that it shows power relations as fluid. Subalternity is ascribed to the historically marginalized groups as well as to the Europeans and the people from educated class. This not only destabilizes the conventional binaries of power, but also points towards an endorsement of the composite and the mongrel—fused identities sharing different subject positions as well as different physical characteristics: characters who are both subaltern yet powerful, physical bodies that are shared by multiple human identities and human entities that shifts from one body to another. This mongrel quality is something that also corresponds to the generic hybridity of the novel.

The inscrutability of purpose and the inexplicability of the processes that pushes *The Calcutta Chromosome* towards its climax are central to its resistance to any effort to categorize it under any simple genre heading. Commentators such as Claire Chambers, Suchitra Mathur and Diane Nelson put it under the heading of postcolonial science fiction. But all of them agree that Ghosh twists the conventions of science fiction. Mathur in her excellent essay "Caught between the Goddess and the Cyborg: Third-World Women and the Politics of Science in Three Works of Indian Science Fiction" focuses on Ghosh's treatment of women as subaltern subjects. She goes on to show that what Ghosh

presents here is a combination of the science fiction and supernatural—and the subaltern subject here becomes a hybrid of the Harawayan cyborg and the goddess, which she describes as:

A mode of being that combines the artificial with the natural *and* the supernatural, that thus posits a “third” identity for third-world (women) natives which combines the past with the future, the innocence of the organic with the knowledge of the technological. Symbolically, this is represented by combining, in Mangala’s experiments, blood imagery with technology. The shedding of blood, an image that is associated not just with ritual sacrifice, but also with women and fertility, is as necessary as the “scientific” knowledge of malaria in its myriad manifestations to enable the project of overcoming death. (135)

This summation of Mangala’s methodology points towards a scientific discourse; this is a major factor of considering the novel as a work of science fiction. But, on the other hand Bishnupriya Ghosh in “On Grafting the Vernacular: The Consequences of Postcolonial Spectrology” brings up the issue of the ghost stories that may put the novel in line with the native tradition of supernatural tales.

However, as we have explored in the previous chapter, combining the scientific with the supernatural has been a characteristic of postcolonial science fiction in general and Indian science fiction in particular. Most notable in this regard is Satyajit Ray’s Professor Shanku stories. Shanku, the world famous Bengali scientist and inventor, regularly delves into myths, legends, and folklores in the process of his scientific discoveries and adventures and more than often attributes his major inventions to native traditional resources. Shanku often takes the supernatural and tries to analyze that from a scientific point of view. Ray’s fusion of Western scientific methodology with the supernatural and alternative traditions of East in these short stories presents the postcolonial hybridity that became the trademark of postcolonial literature in general.

The most important point in *The Calcutta Chromosome* is that in bringing together the scientific and the supernatural elements, and also in subverting the Western epistemology, it does not employ the classical Hindu mythology or invoke the traditional Vedic knowledge. Rather, the book also subverts the established Indian epistemology. This is apparent not only in the fact that both

Mangala and Lutchman belong to the lowest caste in the Hindu society, but also in the fact that the techniques that the cult of silence uses is not associated with the Vedic traditions in any way, specifically in the matter that a woman performs the rituals, not a Brahmin priest. The rituals are more similar to the subjugated tribal cultures (or at best to occult Tantric practices). Furthermore, Phulboni's supernatural encounter at Renupur signifies a clash between indigenous caste structures. The reader is informed that the haunting at the railway station originates from a Brahmin station master's death on the railway tracks, in his effort to kill a lower caste boy. The hint that this boy becomes the semi-immortal Laakhan (or Lutchman) through the method of interpersonal transference, while the higher caste Brahmin perishes, clearly indicates the book's rejection of the hegemonic Brahminical tradition. The clay idol of Mangalabibi holding a scalpel and a microscope also tells of a non-traditional goddess. It is an entity that rises from the peripheral folk culture rather than from the main body of Hinduism. This not only hints towards an undermining of the traditional Hinduism, but also bringing of the mongrel marginality into focus.

In *The Calcutta Chromosome* Ghosh not only brings together the scientific and the supernatural, but employs the supernatural, or the counter-scientific, to challenge the very notion of scientificity itself. He posits a totally unusual methodology of "knowing" (or for that matter not knowing); he presents an alternative system of "explaining" nature of things, which is just the opposite of explanation—secrecy. Nevertheless, the novel's defiance of the West is not limited to challenging the tenets of science and endowing the silent subaltern with power; neither is it restricted to shifting the focus of the discourse to the margins and questioning the authenticity of the colonial "normative" narrative. In *The Calcutta Chromosome*, Ghosh bends some of the basic generic precepts of science fiction. On the one hand, the use of the science fiction genre allows him to explore the postcolonial subject from a distant and theoretical point of view. On the other hand, science fiction also puts the

novel firmly into the tradition of Western literature, because it is a genre that developed specifically in the industrialized nations of Europe—it is primarily the literature of the developed countries and by extension literature of the mechanical civilization in the urban centers. The novel’s transaction and vacillations between the country and the city, the metropolitan center and the third world periphery, however, subtly displaces the urban notion of science fiction.⁴⁷ And when we see science giving way to secret rituals as the motive force of the book, this displacement becomes more glaring, especially if we look at science fiction as a form of cognitive literature. After all rituals and secrecy by nature resists logical analysis.

As we have already seen, Suvin emphasizes the logical consistency in the development of the plot from the point of the estrangement and Freedman widened Suvin’s definition by modifying the term “cognition” as “cognition effect” to cover the concepts working behind a large number of science fictions that thrive on precritical ideas yet create an effect of scientific thought process.⁴⁸ Applied to *The Calcutta Chromosome*, some of these premises start to create slippages that open up alternative scopes of interpretation. The framing narrative time of the novel is situated in the near future New York, with Antar at its focus. All the futuristic gadgets and globalized economy that the novel presents were very much feasible during the author’s own time frame yet are different from his empirical environment. Again the supernatural occurrences: Phulboni’s story, the incident of the séance, as well as the rituals of interpersonal transference would be considered by a large section of the subaltern mass to be “not impossible;” yet it is alternative to the daily reality of the author’s time. But, again all those

⁴⁷ Obviously, not all science fiction is urban. However, many of the non-urban science fictions are responses to the urban world, or technology, and often the non-urban setting is supplemented by a motive force from knowledge gained through an urban or technological civilization. Ernest Callenbach’s *Ecotopia* (1975) would be a good example of this. The fact that the driving force behind *The Calcutta Chromosome* is derived from a non-urban source makes this novel different from a lot of other non-urban science fiction.

⁴⁸ See “Introduction.”

are narrated through a lens where fact and fiction loses their distinction; in both Phulboni's and Murugan's stories there is no way that one can extricate reality from fiction. Moreover there is no doubt that through its imaginative framework the novel forcibly creates an interaction between the estranging devices of the narrative and the reader's cognitive abilities. The novel's ability to alter the reader's epistemic orientation lends the strange occurrences a peculiar logic of their own, which in a way performs the role of the cognitive element.

For Suvin, science in itself is not the most important thing in a science fiction. According to him the "hypothesis" from where science fiction takes off is not a scientific but a fictional one; it is the estranging device, much like the Russian Formalist concept—to defamiliarize an object in order to draw attention to it. And from that point onwards the story is developed with a totalizing rigor, which is the "scientific" element. This estrangement acting as a formal framework allows the detached eye to focus on the tale's cognitive aspect—where the critical gaze is always fixed on the fundamental realities lying underneath the estranged surface. Thus, as Suvin says, science fiction "shares with the dominant literature of our civilization a mature approach analogous to that of modern science and philosophy, as well as the omnitemporal horizons of such an approach" (20-21). He also points out that unlike the other forms of "estranged fictions" (fantasy, folk tales, myths etc.) science fiction does not exist outside time, but in all times and spaces.

It is needless to say that *The Calcutta Chromosome* defamiliarizes the scenario to attract the reader's attention to the subaltern voice. The novel conforms to many of the components of Suvin's definition. The time line in *The Calcutta Chromosome* jumps forward and backwards—from 1995, when most of the action in Calcutta takes place, to the near future, when Antar investigates Murugan's disappearance, and then again to the colonial past of Ross's experiment. But nothing in the novel exists outside time. The trans-temporal existence of Mangala and Laakhan, which appears as the supernatural

element, is also not really outside time. Rather it is very much located in specific temporal realities; hence the evolution of the subaltern—from the colonial subject, through the postcolonial periphery, to the secluded immigrants in the metropolis and the oppressed workers of a corporate hegemony.

Nonetheless, the novel's association with ghost stories and folk elements, that eschew any logical explanation, may put it in the category of "other estranged fictions." This is the point where the author tweaks the conventions of science fiction. He uses the "totalizing rigor" of science fiction to develop the themes of supernatural and irrationality. His logical analysis of strange and inexplicable occurrences and methodical research of an inscrutable purpose alters the commonly accepted generic principles. Although, the novel delves into occult practices and counter-scientific activities, it follows their development through a theoretical point of view. It proposes certain postulates and then follows them through, which creates the "cognition effect." Murugan proposes:

Not making sense is what it's about—conventional sense, that is. 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. (105)

The book follows this through with its enigmatic logic and subtle hints at the main action that takes place off stage. Never is the reader actually shown how Laakhan and Mangala achieve immortality, or how the act of interpersonal transference takes place. Even when Sonali (who is also the promoter Romen Halder's mistress and Phulboni's secret daughter and at the end of the story is identified by Antar as his friend Maria) sees the ritual, it is shrouded in the holy smoke of the burning fire. The novel spares the reader the tyranny of knowledge, and behind the hectic action of the book a silent line

of logic brings the narrative towards its ambiguous end. This internal consistency of the plot logic is very science fictional.⁴⁹

This generic fluidity again reinforces *The Calcutta Chromosome*'s tendency towards non-conformity. Breaking down of rigid generic boundaries has been a mark of postmodern fiction in the West as well as postcolonial fiction. In works of China Mieville, Joanna Russ, Michael Moorcock and Ursula K. Le Guin the boundaries between fantasy and science fiction constantly collapse. The same can be said of postcolonial science fiction writers such as Shirshendu Mukherjee, Vandana Singh, Eden Robinson, Sheree R. Thomas and Nnedi Okrafor-Mbachu. In fact by anthologizing works by these postcolonial writers in *So Long Been Dreaming* Nalo Hopkinson and Uppinder Mehan posits that generic hybridity is a mode of resistance regularly employed by postcolonial and postmodern writers.

By using a form where generic boundaries collapse, *The Calcutta Chromosome* at once allies itself with Western as well as postcolonial modes of resistance. The multiplicity that the bringing together of the opposite qualities of supernatural and science, logicity and irrationality, and silence and utterance engenders becomes the stylistic parallel of the thematic questioning of the normativity of Western logic and Western form of literature at the same time. This mongrelism also works against the privileged and "pure" Indian traditions; thus placing the novel at the center of two sets of dialectics: Indian/Western and traditional/hybrid. By bringing together such oppositions, *The Calcutta Chromosome* also throws up a futuristic postcolonial conversation that traces the evolution of an alternative subaltern discourse and hints at a future mode of subversion. Such subversive discourse,

⁴⁹ According to John W. Campbell, the logical orientation of science fiction sets this genre apart from fantasies. Campbell writes in his "Introduction" to *Analog 6* (1966):

The major distinction between fantasy and science fiction is, simply, that science fiction uses one, or a very, very few new postulates, and develops the rigidly consistent logical consequences of these limited postulates. Fantasy makes its rules as it goes along [. . .] The basic nature of fantasy is "The only rule is, make up a new rule any time you need one!" The basic rule of science fiction is "Set up a basic proposition—then develop its consistent, logical consequences". (xv)

which *The Calcutta Chromosome* directly embeds within Indian marginalities, however, loses its local grounding and assumes a transnational dimension, in Ghosh's future: hence it responds to the international hegemony of the Western multinational corporations. Thus, as the subaltern cult preserves its unique identity through its silence and through the refusal to join the normative colonial discourse, the novel guards its uniqueness by uttering the story preserved by that silence in a subversive form—a form that also aids in extrapolating and assessing the potential of such seditious discourse in the future.

Alternative Dystopia: Science, Power and Fundamentalism in *Signal Red*⁵⁰

Rimi B. Chatterjee's *Signal Red* (2005) unravels the socio-political problems of postcolonial India through the framework of a future dystopia and critiques the fundamentalist trends that may lead the nation towards a totalitarian tomorrow. However, I argue, unlike postcolonial fictions written in more mimetic modes, the science fictional framework allows *Signal Red* access to more critical devices such as futuristic extrapolations and literalizing metaphors. Along with critiquing the fundamentalist trend these devices let the novel indicate the deeply hybrid nature of the Indian nation and of Indian science fiction through a double dialectic between the West and the East, and between hybridity and indigenism. I argue that only such a dialectical force as present in *Signal Red* can articulate the real possibilities of the postcolonial future.

The logics of colonialism employ various cultural and punitive apparatuses to create an environment conducive to the maintenance of the status quo of power relations. Postcolonial discourses attempt to resist these colonial ideologies of domination. Sometimes this resistance takes the form of an essentialism that demands total decolonization and return to a mythical and organic

⁵⁰ Previously published in *Journal of the Fantastic in the Arts* 20.1 (2009), 24-41, as "Alternative Dystopia: Science, Power and Fundamentalism in Rimi Chatterjee's *Signal Red*."

precolonial past, rejecting any form of hybridity as mimics of the colonizer. Such resistance also entails essentializing and celebrating of racial characteristics. But, like any other form of essentialism this approach often degenerates into provincialism and ultimately falls back on the exclusionary dualistic ideology of domination, only in an inverted manner. The contemporary ideologues of the politico-religious forces that seek to implement Hindu views of life on the Indian populace present such a scenario. However, such a scenario undermines the “free” status of a postcolonial nation. Chatterjee raises some very pertinent questions not only regarding these essentialist ideologies in the Indian context but, more importantly, how the nation can escape the clutches of a new hegemonic order.

Signal Red indicates that the dualism inherent in Hindu Nationalism, or “Hindutva” as the Sangh Parivar (the coalition of Hindu Nationalist parties in India) prefers to call it, is not only an East/West dualism, but an insider/outsider split, where only the Hindus belong to the Indian tradition; all others, especially the Muslims, act as the Other to the definition of the Hindu self. What makes such essentialism more dangerous is the scientific discourse that these Nationalist forces weave into their ideologies while whetting the irrational impulses of the populace. The novel thus projects a semi-dystopic India where science is gradually becoming a tool in the hands of fundamentalist forces to establish a Hindu hegemony.

With the rise of India’s scientific establishment and the flexing of its nuclear and economic muscles recent scholarly works have started paying close attention to the links between religion, science and politics in India. It is to be noted that since the 1990s the resurgence of Hindu Nationalism started becoming increasingly prominent, especially with the demolition of Babri Masjid in Ayodhya and the resulting riots in 1992, and the political ascendancy of the Bhartya Janta Party (BJP) in 1998

after two aborted attempts.⁵¹ The nuclear arming of the military in 1998 and the Kargil war with Pakistan in 1999 further strengthened the Hindu Nationalist fervor as well as led to increased defense budget and defense research and with it enhanced state control over scientific activities. The nuclear armament and the missile development programs continue to be India's major spending areas. The Indian space program has also earned worldwide accolade in recent years, and cemented India's position as one of the few space faring nations with the moon mission Chandrayan in 2008.

However, alongside this techno-scientific progress, behind which BJP government played a big role, Hindu Nationalists have insistently campaigned for the recognition of "Vedic science." The promoters of Vedic science propose a golden age of scientific thinking in India, which was then disturbed and disgraced by different invaders and the "stolen" scientific knowledge ultimately found their way west to Europe. In other words, all scientific knowledge available to the modern world today can be traced back to the Vedic sages of ancient India. Hindu Nationalists cite resemblances regarding the concepts of plurality of knowledge and non-dualistic philosophy of science in Advaita Vedanta sutras of the first millennium BCE India and postmodern Western science among many others to support their position.⁵²

⁵¹ Babri Masjid or the Mosque of Babur, a 16th century Mosque in North India, which seems to have been raised on the ruins of an earlier Hindu temple, was destroyed by hardliner Hindu Nationalists in 1992. This destruction led to large scale communal riots between Hindus and Muslims. This demolition was supported by Hindu Nationalist parties such as VHP and BJP.

⁵² Bharath Sriraman and Walter Benesch discuss the similarities between postmodern Western science and Vedic science: In modern science, the synthesis of "nature/mind" in observation, experiment, and explanation, especially in physics and biology increasingly reveal a "non-linear" totality in which subject, object, and situation have become inseparable. This raises the interesting ontological question of the true nature of reality. Western science as seen in its evolution from Socratic Greece has tried to understand the world by "objectifying" it, resulting in dualistic dilemmas. Indian "Science," as seen in its evolution from the Vedic times (1500—500 BCE) has tried to understand the world by "subjectifying" our consciousness of reality. Within the Hindu tradition, the Advaita-Vedanta school of philosophy offers possibilities for resolving not only the Cartesian dilemma but also a solution to the nature of difference in a non-dualistic totality. We also present the Advaita-Vedanta principle of superimposition as a useful approach to

This coexistence of Western techno-science and ancient Vedic science in the agendas of Hindu Nationalists is seen by many scholars as primarily serving political ends. Scholars such as Meera Nanda outright dismiss all claims to Vedic science as backward looking and as a hindrance to progress as conceived by Enlightenment Rationalism. In *Prophets Facing Backwards* (2003) Nanda fiercely criticizes the proponents of Vedic science and the ideology of Hindutva, along with many other dissenters of Enlightenment modernity.⁵³ Nanda says:

Hindu nationalists are obsessed with science, in the same way and for the same reasons as the “creation scientists” are obsessed with science. They display a desperate urge to “prove” that modern science verifies the metaphysical assumptions of the classical, Vedic Hinduism, and conversely, the sacred books of the Vedas and the Upanishads are simply “science by another name.” Rather than take the contradictions between science and the Vedic conception of nature seriously, Hindu nationalists deny that there is any contradiction at all. This view of Vedic science is being pushed in schools, colleges, and the mass media to create a generation of Indians who think in Hindu supremacist terms. [. . .] The reality in India is that today, there is not one but two populist movements that stand shoulder-to-shoulder against secular modernity: they are the postmodernist new social movements on the left, and the Hindu nationalist movements on the right. (xiv)

Nevertheless, according to many of her critics, Nanda’s attack on religious fundamentalism and the use of science to propound irrational doctrines become a critique of Hinduism itself and any other ideology that deviates from Western rationality. Vinay Lal accuses Nanda of being inflexible and often inaccurate in her analysis of Hindutva, which is clearly different from Hinduism. Lal sees her book as rigid and Eurocentric, even to some extent Euromanic.⁵⁴ However, despite his differences with Nanda,

modern physical and social science, which have been increasingly forced to reject the absolute reductionism and dualism of classical differences between subject and object. (39)

⁵³ Nanda questions the scientificity of Vedic science by citing Subhash Kak and Rammohan Roy’s tendency of projecting Vedic passages as coded form of scientific language. She further enquires about the scientific methodology of the ancient sages, the absence of which marks Vedic science as a form of mysticism. She also points out that the scientific tradition of Indian thought that the Hindu Nationalists refer to rather evolved from rationalist, skeptical and naturalist strand of Hindu philosophy to which Vedic tradition was opposed. In other words she wants to validate claims of scientificity of a non-Western tradition through the methodology of Western rationalism.

⁵⁴ In “The Tragi-Comedy of the New Indian Enlightenment: An Essay on the Jingoism of Science and the Pathology of Rationality” Lal describes Nanda’s book:

Lal too sees the rising fervor of Hindutva as something to be concerned about. This is, though, an issue which requires subtle understanding of the Indian psyche and Indian history as well as an open mind to the Western ideas. In *Signal Red* Chatterjee constructs a scenario where the problem of “belligerent” Hindu Nationalism or “Hindu Modernity,” as Nanda calls it, can be discussed and understood with access to both the Western and Indian points of view.

Chatterjee claims that *Signal Red* came out of her own experiences as a teacher in Indian Institute of Technology, one of India’s premier scientific research centers, in Kharagpur located in the south-western corner of West Bengal (personal interview with the author).⁵⁵ She locates the primary stage of her novel in the high security defense research institute situated in the dry and barren plateau of central India (Madhya Pradesh). The central character of the novel, Gopal, an important scientist in a high security defense research institute, mentioned in the novel as the “Centre,” initially trusts his superiors. The visit of Anu, his wife Vidura’s friend and a sociologist, sows seeds of doubt in his mind about his work and the moral responsibility of his superiors. Anu’s questions regarding the morality of

Though the resurgence of Hindu nationalism as a political phenomenon is well-understood, Meera Nanda is correct in suggesting that the ascendancy of Hindutva has other dimensions, such as the advent placed by cultural nationalist on 'Vedic science'. However, apart from this rudimentary insight, Nanda's contribution, far from being a resounding demonstration of postmodernism's complicity in the projects of Hindu nationalism, is a striking testament to her own commitment to a rigidly positivist, ferociously intolerant, and intellectually sterile conception of modern science and the Enlightenment rationality which she views as the pinnacle of human achievement. Nanda displays an impoverished understanding of the scholarly contributions of the last three decades and is unable to countenance the idea of a plurality of sciences; at the same time, in view of her deliberate conflation of Hindutva with Hinduism, and her attempts to equate Hinduism as such with Nazism, it is clear that Hinduism itself stands condemned, and not merely resurgent Hindu nationalism. Nanda's book is an indiscriminate and uninteresting assault upon the innumerable enemies of reason, and it is, ironically, likely to have the result of further eroding confidence in self-proclaimed champions of rationality such as herself and the modern science of which she claims herself to be a true and peerless inheritor. (77)

⁵⁵ I interviewed Chatterjee, who is a professor of English at Jadavpur University, Kolkata in West Bengal, India in August of 2008. Her own experience at IIT Kharagpur during BJP’s stint at the helm from 1999 to 2004 served as inspiration behind the novel. She found the expanding rightwing control over technical and scientific resources very alarming, specifically the false logic of indigenism to inspire the scientists. She also expressed surprise at how easily the scientists can fall victim to such irrationality as the discourse of religion.

creating weapons of mass destruction unearths Gopal's own doubts, which grows with his discovery of projects related to biological weapons and live test subjects, and ultimately makes him a deserter.⁵⁶ But in this dystopic scenario nobody can leave once they enter the arena; and Gopal too cannot escape the *1984* like surveillance system. An electronic device placed by the authorities within his body gives him up and he is herded back into the Centre, only to be kept as a virtual prisoner.

The book tracks Gopal's journey in three parts, the first two of which are seen from the perspectives of Anu and Vidura; only the last part projects Gopal's thoughts directly. This three part division also serves as a method of stage by stage probing of the central concerns of the book. Anu's visit stirs the calm surface of the Centre, which apparently seems utopian in its efficient organization and material wealth, at personal and moral levels. Her visit moves the suppressed emotions in Gopal and Vidura's stagnant marriage by alerting them to the stereotypical gender roles that they are performing. Anu's confrontation with Gopal also rakes up the moral ambiguities of creating weapons that he has kept suppressed for long; it further stirs up the distrust for higher authorities in his mind. The second part narrated from Vidura's point of view, reinforces the doubts raised by Anu's visit, especially through the visit to Songarh, the field station for the Signal Red Project, the adjacent village, the "death forest," which is evidently used as a test ground for biological weapons. This section also reinforces the gender roles that the patriarchal mode of society expects its subjects to play. Both these elements combine to alienate Gopal further from the authorities. The third part shows Gopal's total

⁵⁶ He flees the Centre after he is chosen for "Chakravyuh," a top secret defense project with absolutely no moral answerability for its inventions. Chakravyuh refers to Chakra Vyuh (circular formation) an ancient Indian war formation said to be the most difficult to break into and almost impossible to come out of without knowing the proper technique. It also refers to the Indian epic *Mahabharata*, where the young and valiant warrior Abhimanyu was treacherously killed by a host of Kaurava warriors after he broke into their formation. This incident is regarded as one of the most dastardly acts committed in the entire epic. Consequently Chakravyuh connotes a trap from which no one can come out alive and also a total absence of any moral principle.

disillusionment, his attempted escape, and his capture. He appears as the Frankenstein figure wracked by his own guilt and pursued by the monster he has created.

The focus of the book—the struggle between the ideologies of domination and the rational mitigating forces—though is foregrounded from the beginning. By rationality I here denote the liberal, logical thinking capability of human beings, which stands in opposition to the fundamentalist attitude based on a set of given beliefs or faith. Rationality is the human mind's ability to interrogate, perceive, analyze and logically conclude on its own. This is the capacity that makes humans aware of different possibilities and opposes the self-serving false logics of unidirectional fundamentalist thought process. The novel pits these two forces starkly against each other by juxtaposing Gopal, his wife Vidura, and their friend Anu, all educated in Cambridge, against the traditional Sanskrit scholar and orthodox religious preacher Rahil Vidyadhar. Rahil is also a proponent of Hindutva (Hindu Nationalism) and Vedic science. In the novel Rahil advocates Vedic science by trying to interpret ancient “shlokas” as coded scientific formulas and delivers sermons on the glories of Indian science.⁵⁷ His role as an inspirer of pride, though, is soon exposed as a cover for his role as an agent of the powers that want to establish a Hindu hegemony in the country. Rahil reveals that he desires to control people's minds—not only through ideological devices like religious preaching and motivational talks, but also through physio-chemical techniques that he is researching at the institute's facility and which will be perfected once the top secret project “Chakravyuh” is implemented.

⁵⁷ Rahil explains to Vidura: “Yet another deals with the *trimurti*, Brahma, Vishnu, Shiva, in terms that suggest metaphors for chemical process. The odd construction and metaphor led us to suspect that they were the codified form of some secret knowledge. Usually the possessors wrote it down, but they disguised its true nature so that the uninitiated would not know” (21). He delivers sermons on the glories of Indian science, “India has lost her pride in science. Yet we were the source of nearly every worthwhile discovery known to science. We must point out to the world community the debt it owes us” (21). But his pragmatism is evident when he follows this up with, “In the meantime, we work to rediscover our traditions. My main role is to inspire a sense of pride in those who work here” (21).

Rahil is a proponent of an ideology of exclusion, which rejects anything not associated with the Hindu tradition, especially anything related to Western civilizations. He says, “Be wary of the gifts of Westerners, they give with dirty hands. You will catch contagion from their unclean gifts” (23). He points out Arabs and Muslims as thieves who stole the ancient knowledge and sold it to the Europeans and promotes cleansing the remnants of their traces in the country. He is sickened by the prospect of learning from the West:

‘And now they presume to sell it back to us. They have no right. It was ours, ours from the start.’ His eyes flashed. ‘That is why I find it sickening when they drone on about how Western science was created by Aristotle. Fools! The Greeks too stole from us. That is why I boil with anger when they lay hands on our ancient birthright. We must mobilize to stop this raping of our motherland. Had they left our science to us, we would have done great things. But they took our wealth and destroyed our industries. That is why I call them thieves, looters, plunderers, usurpers, colonizers. Dirty foreigners with dirty minds and dirty hands. It will take us years to clean their left behind filth from the motherland, but we will do it. We will assert, we will *prove*, the purity of our culture. Even the human filth they have left behind will be purged.’ (24-5)

When informed about Anu’s part Hindu, part Muslim background, Rahil considers her an unfortunate impure entity that does not know her place in the society. His cry for racial and cultural purity reflects the actual vendetta of the Hindutva movement. In “Encountering *Hindutva*, Interrogating Religious Nationalism and (En)gendering a Hindu Patriarchy in India’s Nuclear Policies” (2006) Runa Das argues that in order to protect the identity of Hindu India it was essential to create the idea of a Hindu nation which excludes the Other, the Muslim as well as the West. Das comments that major Hindu Nationalists like V. D. Savarkar, a key figure in the Hindu organization Rashtriya Swayam Sevak (RSS), promoted such ideas:

Savarkar defined the boundaries of Hindutva in a rather communal manner and further circumscribed its usage in defining the parameters of a modern India. Pitrabhoomi (Fatherland), jati (bloodline) and sanskriti (culture) were identified as the three principles of Hindutva, of which jati became the most critical in establishing the basis of communalism in modern India (Deshpande 1995). This is because the concept implied that only those whose sacred land (sacred to their religion) lay within their fatherland (India) actually had the moral basis for claiming citizenship of India, thereby

privileging a cultural/religious rather than a territorial concept of Indian citizenship, which consequently for the Hindu nationalists became the basis of cultural nationalism in India. (374)

Under this rubric any one whose sacred land existed outside the geographical boundaries of India were considered foreigners. This ideology was primarily geared towards excluding the Muslims but also other faiths (Jews, Christians etc.) that came to India from abroad. Thus, as Das puts it, “Savarkar’s definition of a Hindu community was a purely political entity based on race and the joining of religious dogma so as to mobilize the majority of the Hindus, while streamlining differences, to face an immoral Other” (375).

Rahil’s rhetoric in *Signal Red* not only echoes the ideology of Hindutva, it also identifies the neighbors as India’s main enemies—obvious allusions to Pakistan and China, the two other nuclear powers in the region, with whom India has histories of animosity. Such rhetoric refers directly to the Hindu hardliner position in the real world. Das quotes from her personal interview (2002) with Sabitiri Pande, the State Secretary of Mohila Morcha (Women’s Wing) of West Bengal BJP State Working Committee:

For ages, our nation has been patient and has tolerated all kinds of atrocities committed on us and our women by [Pakistan]. They are still not satisfied with all their gaddari [acts of betrayal] towards us. Through their test-firing of the Ghauri in 1998, they have come as far as challenging our might and have even re-iterated that another Ghauri [Pakistan] may defeat Chauhan [India][14] [. . .]. As representatives of our nation, we call our leaders to answer this call. A nuclear policy for India to give Pakistan a befitting reply is a must. (383)

The propensity towards militancy reflected in Pande’s words is evidently a response to the threats posed by foreign powers. Like all other forces of domination the Hindutvavadis (proponents of Hindutva) exploit this outside threat to reinforce their own ideology inside the country. Similar tactics are employed by the government in *Signal Red* to pass the “Defense Oriented Research Act” by heightening security tension in the country through a fake terrorist attack code named “operation

Dhritarashtra.” This operation is also an instrument of implementing the hegemonic exclusionary dogmas on the population. The name of the project “Dhritarashtra” itself hints at this process. The reference to Dhritarashtra, the blind Kaurava king from the epic *Mahabharata*, at once signifies the blindness of the population to the real mechanics of power, and also at the mechanics of hegemony which works at the unconscious level to assure popular allegiance.⁵⁸

According to Antonio Gramsci hegemony implies a popular consent to the dominant ideology. In the Gramscian model spontaneous consent by masses to the rule of the dominant group is not only necessary but this model also requires that the masses mistake the ideology of the dominant class as their own. This model further stipulates that overt coercion alone cannot lead to hegemony; the dominant class must act as the moral and intellectual leaders to the subordinate classes. However, Gramsci also concedes that establishing hegemony requires the dominant class to employ force to liquidate opposition. In *Signal Red* to establish a Hindu hegemony in India people like Rahil and the Director of the Centre employ talk sessions where Rahil appeals to the scientists’ sense of religious identity, exploits the people’s love of tradition and inspires pride in India’s past. Yet, he is prompt to quell any opposition, wherever it comes from—his stinging criticism is directed equally at the Western influenced Anu and the liberal Hindu philosopher Dr. Meenakshi Sundaram.

However, this manipulation does not stop at the ideological level; repressive force is used when any subject dissents—through surveillance, coercion, and sabotage. The fake terrorist attack is a

⁵⁸ Dhritarashtra was the blind Kaurava king in *Mahabharata* whose physical blindness regularly extended to his moral blindness, especially to the deceitful and immoral acts of eldest son Duryadhona. He is also seen as an ineffective and impotent king who is maneuvered by his brother-in-law Shakuni, the real political brain behind all the political mechanics of *Mahabharata*. In Indian tradition Dhritarashtra connotes inability to see and understand moral and political evil, even a lack of such desire.

sabotage that creates a state of panic, when people are willing to unite against an evil outsider.⁵⁹ Furthermore, all the inhabitants of the Centre are under constant surveillance by the state authorities, even when they are outside of its boundaries. Gopal and Vidura's journey to the field station in Rajasthan, where Prasad is sent as a surveillance agent reinforces this idea. Gopal is forced to go to the conference of defense scientists in Pune and is spied upon through the high-society prostitute. These supervising elements create a claustrophobic atmosphere almost similar to the panoptical control of "telescreens" and "Thought Police" in *1984*. This surveillance system turns into a device of physical control when an electronic tracker is implanted into Gopal's body. Even if he runs away from the Centre his body would never allow him to be free. This is literally etching the ideology of domination on to the subject's physical existence. The use of such control mechanism is also the aspect where the use of dystopic science fiction as a genre becomes so effective. This genre allows projecting a future vision of the country through extrapolation of the present socio-political and technological trends, which works as an alarm for the intellectuals of the country to the dangers of excessive indigenism.

Chatterjee, however, shows that this dominance is not limited to the larger political sphere, but permeates to the core of quotidian matters, especially to caste and gender roles. This aspect is reflected in Rahil's justification of the caste system and allusions to similar class divisions in the Western nations, but most strikingly in the use of the lower caste inhabitant of the village near Songarh as live test subjects of the bio-weapon project. The inhabitants of the village not only act as guinea pigs, but

⁵⁹ This is much like the ceaseless war in George Orwell's *1984* (1949) or in Margaret Atwood's *The Handmaid's Tale* (1985). *1984* employs all the ideological and repressive state apparatuses (in the Althusserian sense) in order to establish English Socialism (Ingsoc) in the superstate of Oceania. In order to do so the Party creates myth of a constant war with the other two superstates, Euresia and Eastasia. The Party interpellates its subject within the ideology of Ingsoc by creating the evil figure of Goldberg. George Orwell's *1984* is often seen as an indictment of the Stalinist totalitarianism in USSR and the betrayal of the communist revolution. The figure of Goldberg is seen by many as a reference to Joseph Stalin's deposed adversary Leon Trotsky, who was regularly vilified by the Soviet government as an evil Other/outsider threatening the stability of the Soviet system. Similarly Atwood's book creates an America (Gilead) ruled by orthodox Christians where all women's rights are suppressed. Here too the threat of a war sustains the emergency state.

the Centre's agents keep them herded in the village by playing on their superstitions. The village is marked as "cursed" by those in power, and the curse follows the villagers wherever they go; consequently nobody shelters them in other villages. The worst part of this treatment is that the villagers themselves believe in their own misfortune. This is a social evil which has stalked India for centuries and which the men in power have always exploited. From this point of view the dilapidated village acts as the dark underside to the high-tech Centre. The villagers are trapped by a web of superstition—a primitive fear of darkness and death; the scientists at the Centre are trapped by another—a hollow sense of pride, egged on by people like Rahil, and a constant fear of failure. They are bound by orthodoxies, closely controlled and constantly monitored. The villagers cannot leave because of social rejection for the fear of the curse; the scientists cannot leave because of professional rejection engineered by government agents.

Similar reactionary stance can be observed in Rahil's gender politics. He vehemently upholds patriarchy, encouraging women to emulate examples of classical "veermatas"—mothers of brave sons. This vested gender role is witnessed in the male dominated social structure of the Centre. In Anu's words, "Defense science kind of forces a patriarchal model of marriage on people, where Daddy does something vague and important outside the house all day and Mummy potters in the kitchen or goes shopping, blissfully unaware of it all" (128). The failure of this model is seen as a failure of the man. Gopal's colleague Prasad as well as the director of the Center chides him in his failure to control Vidura's actions. A woman with brain threatens the reified sphere of male control—Anu, Nalini, Vidura, Putlibai are all threats on different levels. The novel censures all such gender domination by referring to the history of exploitation of women in the power games of men—by objectifying their very existence—through the stories of self-immolation of Rajput queens. The novel claims such objectification is endorsed and abetted by the ideologies of Hindu patriarchy even in the present day,

irrespective of class and caste. Chatterjee does this by paralleling low caste (and low class) Putlibai and high caste (and high class) Vidura in their vulnerability to the male dominated society.⁶⁰

What is important here is to realize that this gender and caste oppressions and rhetoric of purity and religious solidarity are part of a larger ideology of dominance. This is an ideology that functions not only through forced implementation of its tenets, but ingrains itself in the social fabric to elicit complicity from the very sections of the population it manipulates. Thus hegemonic presence of this ideology is secure from any rebellion. Chatterjee's use of science fictional tropes such as advanced technology, biological experimentation, and most important of all future dystopia setting, permits her to speculate that the ideology of dominance that has repressed India in the past and is marring the country in the present may end up tyrannizing the country in the future. Ejecting the European forces would not then serve any real purpose if the population strides towards another set of domination tactics marked by the same dualisms and exclusivity as present in the ideology of the colonizers.

⁶⁰ Runa Das claims that issues of gender were negotiated from early on in the discourses of secular nationalism. She cites the examples of Bengal Renaissance and the Gandhian Nationalists who paid close attention to women's liberation. However, Das agrees with Partha Chatterjee that the "Nationalist Resolution of the Woman Question" was in reality reinforcing and modernizing Indian patriarchy:

[. . .] where the Indian nationalist creation of 'women' took the form of Grihalakshmis and Kulalakshmis (goddesses of home and kin-groups). Thus, the best Indian nationalism, as Chatterjee claims is a male nationalism that defined the public domains of the potential post-colonial India only to tighten the grip over women at home. (371)

She points out that while women's oppression was real their identities were used to construct the vision of the nation, embedded in the Hindu Nationalist psyche as well as in the secular nationalism as Bharat Mata, the Mother India. Das also claims that women's bodies rather than attracting attentions in their own right continued to be exploited as ideological tools of constructing national identities by various groups of men. This is epitomized in Putlibai. Putlibai, the starved village woman whom Vidura befriends is victimized by men—her husband deserts her, her daughter is raped and she is chased away from her husband's property by his relatives. Still she tries to eke out a living on her own. But she realizes the futility of her effort as well as Vidura's to help her. She tells Vidura, "Do you think I am a fool? I too have been married. He will make you behave as your kind should. Women are never free" (153). The concept of subservience of women to men, and even their objectification in politics is reinforced by the reference to the historical role played by women in politics. Gopal and Vidura goes to visit Chittore Garh, mountain fort of Rajput kings, which is famous for the brave acts committed by its women. The most famous association is however the self immolation of the queens and royal women when faced with the prospect of an enemy victory and sacking of the fort. This association coupled with Vidura's ultimate immersion into the pleasures of motherhood points towards the difficulty of overcoming this tradition of male dominance—the tradition of Grihalakshmis, the tradition of what Rahil calls the "vir-mata," mother of brave sons.

Chatterjee nonetheless suggests alternative possibilities that can rescue the nation from falling into the traps of totalitarianism. In contrast to the longing for a mythical “pure” tradition Chatterjee advocates hybridity or acknowledgement of multiplicity. Her idea of hybridity is similar to postcolonial theorist Homi Bhabha’s, who posits that the notion of purity in any culture is practically inapplicable, be it in Europe or Asia or Africa. He highlights the internal diversities inherent in every civilization and points to the moment of colonization as adding of another dimension to the cultural stream. From this perspective any struggle for a pure culture inspired by the myth of an unadulterated precolonial past seems impossible. Chatterjee grabs on to this idea and proceeds to claim that a one-dimensional vision of nation is not only false but is dangerous, especially for a nation like India, which has been at the center of numerous cultural assimilations from time immemorial. Her concept of hybridity is not limited to the postcolonial subject’s fused identity—mixing of European and Indian influences—but a larger cultural one. Chatterjee concedes that some of what Rahil says regarding India’s superiority in scientific matters of the past is true; in fact it is more dangerous for that, because it has been taken out of context and all the various foreign influences are totally ignored. In *Signal Red* and elsewhere Chatterjee claims that there is no “pure” tradition of this geographical location.⁶¹ Even during the earliest Aryan migrations there were assimilations with the non-Aryan inhabitants of the land. Claiming a uni-polar view of nation marginalizes the central motto of India—“unity in diversity.”

⁶¹ Chatterjee deals with the issues of cultural exchange and assimilation at length in the context of Vasco da Gama’s arrival to 15th century India in her historical novel *The City of Love* (2007). In this novel she further pursues the theme of cultural exchange between various faiths and traditions by following the lives of three protagonists—a Brahmin boy, who is influenced by Sufism, a Christian pirate who immerses himself into tantric tradition, and a tribal girl, who embraces the tantric inner knowledge after renouncing its superficial rituals. The book brilliantly illustrates the 15th century cultural flux in the Indian subcontinent in the context of power struggle for economic and political control among the Christian European traders, and the local Muslim, Hindu and Buddhist rulers, and religious leaders. A similar sentiment can be seen in Vandana Singh’s science fiction short story “Delhi,” which focuses on the all devouring nature of Indian tradition. Through her protagonist, Asim, who can see through the temporal anomalies around the city of Delhi, Singh shows that the Indian subcontinent has been invaded throughout the recorded history, but it has assimilated all the influences into its great cultural stream—the recent European invasion being only one more tributary in that great river.

The claim to a pure tradition is linked in *Signal Red* to the moral ambiguities of monomania, depicted vividly through the obsessive pursuit of career in the scientists of the Centre and their unidirectional lives. The novel presents through Gopal, his student Agniv, and his colleague Dr. Mani Seth, three different stages of a career scientist. The book opens with the end of Seth's career as a scientist, who is demoted to the position of facility manager because of his noncompliance with the authoritarian diktats—the prologue is his “burn” report. The action of the novel traces Gopal's own transformation, from faith to doubt, from a project leader to a fugitive. His burn report—the epilogue—closes the book. Agniv too is transformed in the course of the novel. He first appears as a dedicated, almost obsessive, scientist bent on acquisition and perfection of knowledge. He shows every potential for treading in the same path as Gopal or Seth. All of them are in a sense naïve to the political interests operating behind their scientific works. All three of them make science their only concern of life, and drifts away from the external reality to the reality of their scientific realms.

Despite their similarities, however, these three persons are very different individuals, and they all end up with their very different compromises with life. Seth's philosophical introspection after his demotion, and his wife Nalini's advice, leads to his peaceful reconciliation with life. His reaction marks a path away from unidirectionism. Conversely, Gopal struggles with his suspicions, but cannot come to terms with the possibility of an existence outside the scientific community. His psychosis is a result of two opposite forces acting simultaneously—his revulsion at the work he is doing, and the fear of losing that very job. It is also a result of Gopal's inner rejection of immoral and hypocritical façade of social status acting against the fear of loss of social prestige and professional isolation. This is Chatterjee's indictment of obsession, which, for her, is another face of fundamentalism. The book suggests that fundamentalism is only another name for unidirectional ideology that completely disregards difference. From this perspective, the religious fundamentalist Rahil is not much different

from the shrewd scientist Prasad. None of them can accept deviation. Gopal suffers because he fears difference; Seth finds peace because he accepts multiplicity. Agniv, however, presents a third possibility. Like Gopal he frets over the morality of using scientific research for creating killing machines and doubts the intentions of the higher authorities. However, unlike Gopal, Agniv confronts his doubts. He chooses not to join the Centre as a scientist; instead he takes up the job of a college professor. Though this is in a sense professional suicide for a scientist of Agniv's caliber, this action gives him freedom to act on his own, not to be dictated at every step by the government. Agniv's action also denotes a realization of differences and possibilities and taking responsibilities for one's own actions—qualities that can lead the nation away from ideologies of exclusion.

Signal Red brings up the discourse of science and rationalism in the context of religious fundamentalism. The book does not present the opposing forces of rationality and irrationality by pitching science and religion against each other. It rather depicts a peculiar and uneasy alliance between science, religion and fundamentalism, and a divorce between science and rationalism. The Hindutvavadis do not reject science or set up a religious hegemony as an antithesis to scientific thinking. Rather people like Rahil incorporate science in their dialogues to establish their ideology as a scientific one. They, however, discard the Western mode of science and chart out an alternate lineage in Hindu philosophy. Although *Signal Red* does not criticize this alternate epistemology per se, it exposes the abuses to which this epistemology is subjected by fundamentalist forces. Scholars such as Meera Nanda criticize detractors of the Enlightenment rationalism such as Ashis Nandy and Vandana Shiva with the argument that they contribute in the nation's backward tendencies and fundamentalist propensities. But such scholars as Walter D. Mingolo as well as Vinay Lal refutes these charges by pointing out that Enlightenment rationalism has led to most of the ideologies of domination including

Western imperialism and colonialism, and most important of all Nazism.⁶² Mingolo further points out that even though alternate epistemologists such as Shiva and Nandy may some time play into the hands of Hindu fundamentalists, they not necessarily subscribe to fundamentalist ideas; rather, their effort is directed against the hegemonic domination of Western ideologies and Western rationalism.

Chatterjee takes a more moderate path. She exposes that fundamentalist forces such as Hindutvavadis exploit the discourse of difference like Vedic science and alternate epistemology to validate “scientifically” their hegemonic ideas. Moreover she points out the divorce between rationality and science. Her novel portrays religious fundamentalists like Rahil Vidyadhar using threat of an outsider’s hegemony, namely that of Western colonizer’s, to institute an internal hegemony—his “totalitarianism with a human face” (103). The novel further shows the religious powers’ attempt to incorporate scientific dialogues, primarily the logical establishment of Hinduism as the best and most scientific method of life, which lends credibility to the fundamentalist claims of Hindutva as the most suitable ideology for the country. This is best exemplified in Rahil’s speech (using charts and slides) to the assembled scientists:

Ancient Indian science connected earth and space in various ways. The artisan, the craftsman, stood in the square at the base of the system. The learned Brahmins, who always wore white, interrogated space and the nature of the universe. But the Mughals and the British sundered that connection between earth and space, between the artisan with his common-sense wisdom and the Brahmin with his knowledge of *Brahma lila* [cosmic play]. Science in hands of the colonial masters became alien, even though it

⁶² As much as Nanda finds links between Hindu Nationalism and Hitler’s Nazism, it was ultimately the result of European rationalism that refuses to recognize difference outside its own logic. Vinay Lal says:

It is now widely accepted that the early admirers of Hindutva, such as M.S. Golwalkar, K.B. Hedgewar, and B.S. Moonje, were open admirers of Hitler and the fascists, and Golwalkar exulted in the salutary lessons that Hindus could imbibe by their attentiveness to the cultural nationalism of the Nazis. "To keep up the purity of the nation and its culture", wrote Golwalkar, "Germany shocked the world by her purging the country of the Semitic races—the Jews". But this cannot be mistaken for a neutral narrative, as the lines that follow amply demonstrate: "Germany has also shown how well-nigh impossible it is for races and cultures, having differences going to the root, to be assimilated into one united whole, a good lesson for us in Hindustan to learn and profit by." (84)

was our own knowledge disfigured. This state of affairs must change if we are to advance as a great and strong nation and take our rightful place in the world. (102)

Chatterjee claims that the ideology of the fundamentalists is very dangerous not because they blatantly lie, but because some of what they say subtly distort the truth (personal interview). As stated earlier, she acknowledges the truth of greatness of ancient Indian science, but clearly sees the falsity of the claim that only the outsiders destroyed that tradition. Using Dr. Sundaram as her mouthpiece in the novel she points out the internal corruption of Hinduism at a certain stage in its history that led to its degradation. Dr. Sundaram points out the problems and crises of Hinduism and the more liberal outlook taken by a large portion of Hindu believers that rejects the various social evils associated with their faith. Chatterjee also asserts through Anu that science is no one's private property; it flows in its own course, from East to West and again from West to East. The changing paradigms of science also makes it flexible to a certain degree and what may seem to be set in stone at one age may not be so at a different era. Scientificity changes its own meaning over time.⁶³ What she finds problematic though is that the Hindutvavadis use this apparently rational discourse to arouse irrational hatred of the Other. They exploit a rationalist discourse to actually further the aim of a faith based ideology, where logic ultimately loses credibility to the diktats of a self-serving hegemonic order. As such scientificity and rationality lose their meanings when distorted by the discourse of fundamentalism. Chatterjee reinforces her point by portraying the scientists as the most vulnerable to this line of thought. Rather than enquiring about the government's patriotic claims, the scientists at the Centre let themselves be guided by one man. Rahil claims in context of the *Gita*, where the warrior Arjuna is guided by Lord

⁶³ In *The Structure of Scientific Revolutions* (1962) Thomas Kuhn proposes that the scientific community needs to have a set of received beliefs, which they take for granted, without questioning. The rigorous and logical way of scientific training embeds these paradigms into the minds of the scientists as irrefutable. However, every so often these paradigms shift with certain violent scientific revolutions that render the earlier facts known as scientific as obsolete, or non-scientific. The Copernican displacement of the Earth from the center of the universe rendered the Ptolemaic astronomy redundant, as the Darwinian evolutionism did to the earlier theories of origin, or as post-Einsteinian physics replaced the Newtonian version.

Krishna, “Scientists too need the lubrication of faith” (103). Here the total divorce of rationalism from their thoughts outside the laboratory is evident.

Chatterjee rather portrays Vidura, Anu (the social scientist) and Nalini (Mani Seth’s wife and a classical dancer) as being more rational than any of the scientists. Even Seth himself thinks about his life and existence more rationally after ending his career as a scientist. Such a scenario represents a clear breach between science and rationalism. *Signal Red* posits that the profession of science does not necessarily imply a commitment to rationalism. This point of view is epitomized in Gopal’s conversation with Dr. Sundaram. In answer to Gopal’s question why she expected a rational response from the audience to her lecture on liberal Hinduism she replies, “Because you are scientists. I had hoped that your training in rational thought would make you eager to consider these questions objectively” (210). Evidently, such is not the case. A profession of science does not guaranty a growth of rational thinking. Rather, being engrossed in the applied aspect of science, scientists often lose sight of the philosophical dimensions, and become not much better than a highly skilled labor force at the disposal of the hegemonic forces. *Signal Red* prompts scientists to seriously reexamine and reassess their commitment to the cause of rationalism and their roles in the future of the country.⁶⁴

In *So Long Been Dreaming* Uppinder Mehan proposed that science fiction should work as a mode of expression among postcolonial writers to imagine the future of their nations. In *Signal Red* Chatterjee uses science fiction not only to imagine the future of India but also as a critical apparatus to critique its present. The double dialectical force, that between Western and Indian traditions, and that between indigenism and hybridity, enables the author to bring about a comprehensive critical discourse

⁶⁴ Interestingly such disconnect between science and rationalism undercuts a large number of science fiction (some of them technocratic) narratives that place scientists as perfect rational beings bogged down by politicians and other irrational people. Among others, Fred Hoyle’s *The Black Cloud* (1957) comes to mind as an example of such science fiction.

that unravels the mounting dangers of a resurgent religious nationalism. *Signal Red* posits the discourses of Vedic science and Hindutva as modes of subverting the dominant Western powers and the primacy of Western epistemology; yet the novel employs a Western literary mode, futuristic dystopia, to engage into this discourse of subversion. Although the Indian tradition is usually characterized by existence of multiplicity, in the novel it falls back to the self/other dualism so prominent in the Western ideologies of domination. However, *Signal Red* also brings in the purity/hybridity dialectics through the clash of the liberal minded protagonists and the Hindu hardliners. Thus, the novel situates itself at the center of this double dialectic to effectively articulate the Indian future; and it does so through the futuristic extrapolation of the contemporary socio-political trends. The novel clearly suggests that postcolonial India needs to strike a balance between these forces to construct a better tomorrow.

The Last Jet-Engine Laugh: Disillusionment and the Postcolonial Nation

Ruchir Joshi's *The Last Jet-Engine Laugh* (2001) published half a century after national independence expresses disillusionment towards the idea of India as a unified nation. This novel invokes the classic science fictional elements, especially of the future-dystopia tales—space warfare, cybernetics, environmental degradation, roving street gangs etc. Yet, rather than dwelling exclusively on larger political issues the novel shifts its attention to the sphere of the personal and the quotidian. The novel examines the past, present, and future of the nation, from its struggle with the British colonists and the political upheavals of the 1970s to the future war against foreign enemies through the eyes of the protagonist, Paresh Bhatt. In the process of telling this story Joshi disrupts the hierarchy of reality and fiction and highlights the intrinsically hybrid nature of the Indian nation.

The highly fragmentary narrative line of *The Last Jet-Engine Laugh* tracks the life of Paresh Bhatt, once a famous photographer, now living an isolated existence in a nightmarish version of Kolkata. The present of the novel finds him an old man, whose daughter Para (Paramita Bhatt) is a high ranking air force officer stationed at the Indian space station. The book opens in 2030 Kolkata, but then continuously jumps back and forth between the colonial India of 1930s and '40s, to the India under Indira Gandhi's emergency rule in the 1970s, and from then on to 2030, stopping and turning at different points in between. Although Paresh is the primary first person narrator of the novel, the narrative perspective often shifts to several other persons' points of view; at times it even changes to third person. These narrative fragments come together to highlight the sinister aspects of the future that India is moving towards and locates the origin of this baleful future in acts committed in the past—not by seeing future events in historical contexts, but by reinterpreting the past in light of the future. Anna Guttman comments in this respect: “Every intervention, from water management to scientific education, becomes potentially deadly. Even the apparent solution of present social problems—such as discrimination against women—occurs in such a way as to undermine any possibility of reading the events in question as progressive” (139). As we shall see in the course of our discussion, this book connects the idea of techno-scientific progress with the shadow of a menacing social outcome, but the novel never for once suggests that the world can go on without such progress.

In *The Nation of India in Contemporary Indian Literature* (2008) Guttman places *The Last Jet-Engine Laugh* in the context of Indian science fiction and comments that this book follows the popular tradition of Indian science fiction fascinated with technological progress, yet simultaneously posits technology itself as the source of trouble and indeterminacy. She compares *The Last Jet-Engine Laugh*

with Amitav Ghosh's *The Calcutta Chromosome* positioning them at two opposite poles.⁶⁵ While Ghosh's book rejects Western knowledge and Western epistemology, Joshi's novel takes such knowledge for granted. In fact *The Last Jet-Engine Laugh* shows a marked ambivalence to West and Western knowledge compared to most other postcolonial, especially Indian, science fiction. Furthermore unlike *Signal Red* this novel does not introduce the discourse of Indian supremacy in science over the West or try to posit modern India's technological might as a challenge to the first world nations (like Narlikar's *Vaman*). *The Last Jet-Engine Laugh* calls the reader's attention to the ubiquity of technology in the future world; the novel also makes it obvious that this technology does not know any border. Technology silently stands in the background as Paresh bathes in the poisonous water, or when he performs his daily ablutions using highly pressurized air jets; technology screams into prominence when Para operates the highly advanced jet fighters, or when she spies upon the world from her space station; and technology takes over the lives of real people when the computer game *Megalopolis 3000* plays out past experiences of flesh-and-blood human beings to their myriad logical conclusions.

Technology in *The Last Jet-Engine Laugh* belongs as much to the Western imperial powers, and as much to the Japanese corporate houses, as it does to the Indian state authorities. The water capsules that hydrates the inhabitants of the future Kolkata are Japanese; Varun Machan, the spy station in space, and the highly advanced fighter jet that Para fly are Indian; and the artificial-storm-

⁶⁵ Guttman however commits some factual and textual errors in her essay. She gives the publication date for *The Calcutta Chromosome* as 1997, while the real date of the book's first publication is 1995 (hardcover, Avon Books). She also mentions the book's protagonist, Murugan, investigating the disappearance of a colleague (138). The fact is Antar, the Egyptian immigrant in New York, investigates Murugan's disappearance. Later, she seems to get confused with the deity Kali (an incarnation of Durga) and Kaliyug, the Age of Kali (146). Kaliyug is not the age of the goddess Kali, but the age that anticipates the arrival of Kalki, an incarnation of Lord Vishnu. Furthermore she confuses Mahishasura (Buffalo Demon) with Mahishasuramardini (Vanquisher of Buffalo Demon) (151). Mahishasuramardini is another name for Durga who killed the Buffalo Demon, Mahishasura. These are some major mistakes which mar her otherwise interesting essay and show Guttman's superficial acquaintance with the cultural milieu from which her chosen text emerged.

blanket used as military camouflage by the Saudi-Pakistani-US alliance against India are Western. The book still refuses to pass judgment on these ever intruding technological presences. Rather this technology is seen as an inevitable result of modern industrial civilization. This over commitment to technology marks *The Last Jet-Engine Laugh* as a perfect specimen of what Tom Shippey calls “fabril” literature. In the “Introduction” to *The Oxford Book of Science Fiction* Shippey writes:

A revealing way of describing science fiction is to say that it is part of a literary mode which one may call ‘fabril’. ‘Fabril’ is the opposite of ‘pastoral’. But while ‘the pastoral’ is an established and much-discussed literary mode, recognized as such since early antiquity, its dark opposite has not yet been accepted, or even named, by the law-givers of literature. Yet the opposition is a clear one. Pastoral literature is rural, nostalgic, conservative. It idealizes the past and tends to convert complexities into simplicity; its central image is the shepherd. Fabril literature (of which science fiction is now by far the most prominent genre) is overwhelmingly urban, disruptive, future-oriented, eager for novelty; its central image is the ‘faber’, the smith or blacksmith in older usage, but now extended in science fiction to mean the creator of artifacts in general—metallic, crystalline, genetic, or even social. (ix)

Joshi’s novel incorporates various kinds of technological novelties in its futuristic world and it is essentially an urban tale marked by all the possible technological connotations. It flows to and fro between a number of metropolitan centers in India and abroad: Kolkata, Ahmadabad, Mumbai, Delhi, Paris, New York. Though events outside the cities always lurk on the periphery, the urban centers are what pump the life blood of this book. The Naxalite violence in the rural Bengal affect the life style in Kolkata, so does the ravages of the India-Pakistan wars that devastated the country side of Bengal; and the poisoning of the water sources outside the cities leads to the various contraptions that clutter the city life.⁶⁶ The novel takes off from this “fabril” universe into Paresh’s mental world; this is a world that materializes before the reader equally through Paresh’s narrative flashbacks and Para’s reconstruction of past incidents while playing the computer game *Megalopolis*. However, these

⁶⁶ The Naxalite movement started as a peasant uprising backed by the Maoist faction of the Communist Party of India (started since the Sino-Soviet split in Indian Communism) against the landlords in Naxalbari in northern part of West Bengal in 1967. The movement soon turned into a mass revolution that resorted to excessive violence and murder and was ultimately put down by authorities in the early seventies.

technological presences and a predominantly urban locale of the novel reinforce the atmosphere of dystopia.

In fact, the world of *The Last Jet-Engine Laugh* is molded in the classic dystopian tradition. The socio-economic matrix in which Joshi locates the future India is marked by a scarcity of clean water that has led to violent internal riots and has sparked a war between India and the Pakistani-Saudi alliance supported by the USA. This war at once projects the perceived threat from an alliance between the Islamic nations against India and an increased American activity in the region, through its puppet countries. This bleak future is also dominated by the Japanese corporate houses that not only control the economic sectors—in this case the management of water resources—but also intrude into the Indian cultural sphere. Durga Puja, the most popular festival in Bengal, which has always been a community affair, is transformed into a commercial event sponsored by the “Japs.” Clearly Joshi is hinting towards the strength of global capitalism, Japanese corporations being the most visible representative of such force in the Indian subcontinent. Furthermore, the age old problem of Indian national life, communal unrest, lurks at the corners and Mumbai and Karachi (in Pakistan) are dead zones as a result of reciprocal nuclear strikes. Even Paresh’s life in Europe hints at constant anxiety of systematic racial profiling and fear of terrorist strikes—as the French police man tells him, “Zees is a war. You are luucki we don’t shoot you” (375). The streets of urban India though are depicted as far more dangerous. The novel describes a water riot in Delhi, where fashion savvy armed gangs wearing American Ivy league school tee-shirts, engage in merciless violence. Kolkata is also divided into territories of various gangs who have the jurisdiction to extort “Puja subscription” (i.e. money for organizing the festival) from the residents. Even the sky of Kolkata is overcrowded and highly hazardous with dangerously unmaintained helicopter shuttles ferrying people around.

These images of environmental degradation, and dependence on technology (cause and effect of the first) and violence aligns this novel with the classic Western dystopias, like Orwell's *1984*, but especially to feminist science fictions such as Joanna Russ's *The Female Man*, Marge Piercy's *He, She and It* and Pat Cadigan's *Tea from an Empty Cup*, which focus on oppression in different forms and find a corollary in the degradation of environment. In the matter of water riots and creation of simulacra of life through cybernetic manipulations the novel closely anticipates Ian McDonald's *River of Gods* (2004) which unfolds in the backdrop of a severe draught and an imminent war between the northern and southern states of India in 2047. Joshi's book also echoes in the nature of the totalitarian control shown by the Japanese firms *The Calcutta Chromosome*'s multinational entity, International Water Council, which controls water affairs of the world. All three, Joshi, Ghosh and McDonald, seem to find the issue of water a major cause of worry in the near future; and all three project the corporate entities as the real exploiters of the future, rather than any political establishment. These dystopic elements are rooted deeply in the present realities of the Indian nation. The main environmental concern in the book—water pollution—is a matter not far from national concern in the real world. The water sources around the major urban centers are often highly polluted from Industrial refuses. Cleaning up the rivers Ganges and Yamuna has become one of the major projects for civic authorities. Clamping down on industries for their contamination of ground water sources is also seen as a primary imperative by many environmentalists and political parties.⁶⁷

⁶⁷ The issue of water pollution specifically came into prominence since the indictment of the Coca-Cola Company for polluting ground water sources around its plant in Kerala in the Southern part of India in 2006. The Hazards Centre and People's Science Institute's report on the plant accuses the multinational firm of polluting water sources with heavy metals like cadmium, lead and chromium, which can lead to physical deformities and can prove fatal to human lives. A joint report (2006) by Hazards Centre and People's Science Institute on the ground water sources in Plachimada village in the state of Kerala where the Hindustan Coca-Cola company had its plant clearly indicates the risks posed to the humans living in the area from the contaminated ground water (8-11). The same kind of concern has also been raised with the plethora of arsenic poisoning in various districts of rural West Bengal in eastern India.

The Last Jet-Engine Laugh, however, assigns the cause of this dreadful condition to chemical warfare—the Pakistani army sprays the glaciers in northern India with toxic chemicals to cut off the main source of water for the Indian army. The relationship between technology and lethal environmental pollution is strengthened by repeated references to the gas leak in the Union Carbide plant on the night of 2-3 December 1984 that killed thousands of people from its immediate and sustained effects, which included pollution of ground water.⁶⁸ The novel does not only use this incident to enforce its view regarding technology and progress but also regarding human relations, politics and class relations. The book's satire is scathing in pointing out the complete lack of concern for the lives devastated from all corners—the ruling government, the American company owning the plant, and even the people with the means to help the victims.⁶⁹ This tragedy amounts to violation of human dignity and is no less vicious than the violence caused by war and terrorism.

The gloom of this future further deepens when we become aware of a pervading sense of terror and communal hatred and realize that the country is at war with its neighbors. These terrorist acts and the war with Pakistan presented in the book rise from historical territorial disputes and, more importantly, from a deep communal enmity between Hindus and Muslims.⁷⁰ But, this element of

⁶⁸ Various estimates put the total death toll in the region of 10,000, which makes it the world's biggest industrial accident.

⁶⁹ While Sandy (Sandhya, Paresh's ex-girlfriend) is traumatized from the effects of the accident, and takes on a proactive role in the rehabilitation of the victims, Viral's (Paresh's friend) father, a former employee of Union Carbide, gets over his shock as soon as Sandy's father convinces him that the accident was not his fault. The book also mentions the mileage that the political parties try to make out of this tragic event, and the total lack of sensitivity in the rich upper-class Indian society regarding the victims.

⁷⁰ The novel mentions that the reciprocal nuclear strikes by India and Pakistan prompted an enforced nuclear disarmament of both countries. Although such disarmament does not have any present bearing, the terrorist nuclear attack on Bombay (Mumbai) that the book refers to has real echoes in the 1993 Bombay Stock Exchange bombing (which left hundreds dead) and the increasing number of terror attacks in various parts of the country. The future war in 2030 also has its resonances in the past; the novel itself recounts the past wars between the two countries—the Bangladesh war in 1971 and the two previous wars over Kashmir in 1947 and 1965. Published in 2001, the novel itself comes at the heels of a fourth conflict in 1999, again over Kashmir. *The Last Jet-Engine Laugh* also brings up India's uneasy relationship with its other nuclear armed neighbor, China, in predicting a three way conflict between India, China and Pakistan in 2007. Joshi presents the West as being without any moral imperative and as bad as anybody else. The Saudi-Pakistani alliance is shown receiving

the psyche of violence and nationalism in an oblique manner—through the personal fantasies and uncorroborated anecdotes about the Indian nationalist leader Subhas Chandra Bose. The legacy of Bose’s armed rebellion against the British, and his mysterious disappearance at the end of World War II provide the context of the book’s other violent trends, though not in any direct historical sense. Rather, Bose’s ideology, which in many respects was dictatorial and the exact opposite of Mahatma Gandhi’s non-violence, provides a mythical subtext that continuously informs all the other violence depicted in the book.⁷² He actively sought help from Hitler’s Germany and also visited the Soviet Union and Italy for support before finally joining forces with the Japanese Imperial army. His militant version of nationalism was much criticized as a form of Fascism from various political corners.⁷³ What is important here however is to realize that though not always recognized, violence played as crucial a role behind India’s independence as Gandhi’s non-violence. Furthermore, this violent nationalism was often marked by overarching religious or communal identity. From Bankimchandra Chatterjee’s fiercely nationalist novel *Anandamath* (1882) to the armed movements in the 1930s to Bose’s militarism, all try to imagine the country as an embodiment of purity, as a mother and a goddess—a typical Hindu view of the nation that discounts any other imaginary constructions. Although Hindu Nationalism during colonial times did not seek to promote communal violence between Hindus and

⁷² Bose’s own account of India’s freedom struggle in *The Indian Struggle 1920-1942* (1964) as well as most of his biographers mention his propensity towards authoritarianism, rule of discipline, and lack of faith in the weakness of democracy. Anton Pelinka’s *Democracy Indian Style: Subhas Chandra Bose and the Creation of India’s Political Culture* (2003) provides an interesting account of the connections between Bose’s career and the contemporary developments in Indian politics. However, Leonard A. Gordon’s book *Brothers against the Raj: a Biography of Indian Nationalists Sarat and Subhas Chandra Bose* (1990) would provide a more comprehensive account of Bose’s life and career. *The Indian Struggle 1920-1942* (1964), compiled by the Netaji Research Bureau (Bombay and other centers: Asia Publishing House), includes a collection of letters, speeches and other documents covering the years 1935 to 1940 as well as the original manuscript of *The Indian Struggle, 1920-1934*. This explains the slight change in the title from the original title first published in 1935.

⁷³ Peter Heehs mentions the name “India’s Fuhrer” assigned to Bose in an effort to mark him out as an Indian version of the German original. Alfred Tyraneur, a British journalist in his 1944 article “India’s Would-Be Fuhrer” portrays Bose as a blood thirsty leader looking for “human sacrifice” for the deliverance of the motherland. Still, in spite of its failure in its military efforts the Indian National Army raised by Bose had a tremendous symbolic and psychological effect, giving rise to the subsequent naval mutiny in the Royal Indian Navy in 1946, which undoubtedly played its role in making up the mind of the British to finally withdraw from India.

Muslims, it still shared the tendency of exclusivity with the ideology of Hindutva (militant Hindu Nationalism) promoted by the Hindu Nationalists of today.

Joshi links these aspects of past violence with the future India by associating references to Bose in Paresh's mind with acts of violence and convoluted logic. Two images that recur repeatedly are the images of Bose's last flight—two Japanese fighters destroying his plane in midair and Bose's sense of incredulity at the suddenness of this violent ending—and Bose's passing of the civil service interview by tricking his interviewer with a logical trap.⁷⁴ These images in a roundabout manner suggest Bose's adoption of the same strategies—violence and false reasoning—used by the colonizers he was trying to evict from his country. To put it differently, this book puts Bose and the British in the same boat of domination tactics.

Bose's legacy is also brought in through Paresh's family friend Kalidas's anecdotes that hint towards a purposelessness of all types of authoritarianism. Kalidas claims to have met Bose in a Soviet gulag in the 1960s. His account, which is as much apocryphal as the claim of Bose's death in an air crash in 1945, takes apart Bose's larger than life image.⁷⁵ Not only is he shown as a broken old man on the verge of losing his mind, half the time he is craving for small material comforts than reflecting upon issues of larger import. Even his death is portrayed as miserable rather than tragic.⁷⁶ Kalidas's narrative is interspersed with Bose's own mental images—mostly about his journey from Germany to

⁷⁴ When asked to pass himself through a small ring at a government job interview, Bose wrote his name on a piece of paper and passed it through the ring.

⁷⁵ The exact circumstances of Bose's death, or if he is at all dead, is the matter of a huge contention. Numerous commissions have been entrusted with the investigation of the matter, but the results have always been inconclusive. Thus, Bose's image as a mythical figure has continued to grow. Aging revolutionaries still await his return.

⁷⁶ Bose dies while urinating on the Siberian snow with Kalidas's assistance: "Kalidas stared in amazement at the fragile bridge of frozen urine. It sparkled in the sunlight like a glassblower's mistake, a shard from a rainbow, stopping Kalidas from realizing for a few moments that he was propping up a dead man" (144).

Japan in a German U-boat and a Japanese submarine. However, these images provide an oblique association in his mind of violence and his own act of joining the Axis power in the effort to free India. Most vivid of these is the imagery of the dead dolphins in the Indian Ocean, the ocean with the name of Bose's own country. Kalidas explains to the Russian army-man, 'He is saying, "Blood on my water. Innocent blood on my sea"' (134)—an obvious association between violence and the Indian struggle, but more importantly a sense of underlying guilt for his role in abetting this violence.

Joshi further buttresses the association of violence and nationalism through the references to Durga, the mother goddess, whom the militant nationalists, including Bose, prayed to in her different incarnations. Durga is the warrior goddess in Hindu mythology, who vanquished Mahishasur, the buffalo-demon, and freed heaven and earth of evil. In fact the Vedic and Puranic texts assign Durga's origin specifically for the purpose of destroying Mahishasur. She is a purely military deity, almost a cyborg warrior, emerging from the collective powers of the different gods. Not surprisingly Durga images are painted on the fighter jets that the all female squadron flies into Pakistan to subdue the "modern day demon." Even the use of women for the purpose of war contributes to this association. Their bodies are almost fused to the bodies of the multi armed machines, creating a cyborg entity, and referring back to the violent aspect of Durga—a lucid association of violence, nationalism and the Mother Goddess.⁷⁷ All these connections ultimately assert the tradition of violence and domination that underlies Indian nationalism and the Indian society in general.⁷⁸

⁷⁷ In *The Last Jet-Engine Laugh* women, especially the fighter pilots are carefully placed in the position of the Harawayan cyborg. Para especially uses this position as her strength, with no illusion of social power she finds the chinks in the social structure to achieve her own end; she even alters her own identity to serve her purpose without any qualm.

⁷⁸ Interestingly in spite of this importance placed on the role of women in war and the cult of mother goddess, the novel does not put forth women as having achieved any real equality in the society. Although there are instances to suggest that the Indian woman has truly achieved "power," these are either isolated occurrences or illusions. Indira Gandhi is obviously an isolated instance of a powerful woman. But military duties performed by women in the novel create an illusion of

Joshi does not only employ the images of indigenous tradition of violence to the broader national contexts, but to the smaller quotidian matters as well, most of the time with crushing irony. He refers to the sinister aspects of Durga Puja—collection of money through intimidation, wastage of resources, and the complete chaos that the city plunges into during the time of the celebration. Mahadev points out this indigenous tradition of wastage to Paresh’s German wife Anna during her visit to Kolkata. Paresh also mentions the intimidation techniques employed by the local goons to raise subscription money. Even in 2030, when the puja has become a corporate sponsored affair, the essential intimidating aspect remains the same. Instead of the local thugs the coercers now belong to the multinational companies that run the economy of the country. The most important points here are the connections among the different types of violence—divine or mortal—and the unmasked assertion that this violence belongs purely to India; it is not imported by the foreign entities that has influenced the nation at different times.

Joshi further highlights the importance of these indigenous violent traits by drawing a relationship between the Hindutva movement and the dictatorial rule of Indira Gandhi during the imposition of emergency from 1975 to '77 and the Naxalite rebellion of the late sixties and the early seventies. In his article “Looking over the Shoulder” Joshi claims, “India’s sectarianism predates the nationalist government of the BJP and has yet to work out of the system” (164).⁷⁹ In this article he connects the ideologies of violence and domination evident in Hindu fundamentalism since the late 1990s with the emergency days, and argues that if this tendency continues India would not be much

power—they are only implements for a purpose and are still under male control. The women are chosen as fighter pilots because of their physical endurance to high G-forces; the command is still issued by their male superiors.

⁷⁹ BJP or Bharatiya Janata Party (Indian People’s Party) founded in 1980 is a major political party in India with inclination towards right wing conservative ideologies and links with Hindu fundamentalists. BJP was in power at the time the book was published.

different from Pakistan under a military dictatorship. In the novel the days of emergency are marked by a claustrophobic atmosphere of tension. Mahadev, who is an old Gandhian and an anti-Indira writer, is constantly under the threat of arrest. Kalidas and many of Mahadev's friends are arrested for political dissent. Mahadev is even physically assaulted after a meeting for expressing anti-government sentiments, only to be rescued by Paresh. This state sponsored oppression which was perpetrated by the same Indian National Congress (INC) party that followed Gandhi's doctrine of nonviolence, and rejected Bose for his dictatorial tendencies, reinforces a major theme in the book—a stark lack of faith in any form of political ideology.

The reality of the Indian political scene only supports this opinion. As international political commentator Aaron Klieman comments:

So thoroughly unanticipated yet seemingly conclusive was the personal defeat handed Indira Gandhi by the Indian electorate in March 1977 that the only event of comparable political significance was her dramatic return to power less than three years later. Mrs. Gandhi's victory at the polls in January 1980 has prompted renewed concern about the likely future course of national politics in India and the prospects for democracy there. (241)

Indira Gandhi, who made sweeping changes to the Indian constitution during the emergency to strengthen her power, lost the election in 1977 due a political miscalculation. This defeat is depicted in Joshi's novel as giving rise to euphoria and regaining of faith in democracy. Yet the Janata Party, the replacement for INC, proved an ineffectual substitute, which lead to a reelection within three years and victory of Indira Gandhi. Political events of such magnitude only underline Joshi's doubt over any type of political "isms" and the sustainability of democracy in such a scenario.

The Naxalite rebellion serves a similar purpose in the novel.⁸⁰ *The Last Jet-Engine Laugh* incorporates in its narrative both the violence and lack of any sustained purpose of this era. The allusions to police atrocities against the Naxalites and reciprocal violence is incorporated through the police officer's visit to Paresh's home, especially when the officer hands Paresh over his .45 automatic and reminds that killing people should be the last recourse, especially for the police. But Mahadev's comment best sums up the book's underlying sentiment for any type of political violence, "the Naxalites are busy electrocuting themselves in other ways, political ways. They think they are revolutionaries. They don't waste time trying to commit suicide by stealing live electricity wires on a rainy night" (303).

In Joshi's novel the violence that has marred India in the past and that troubles India today, is what will haunt India in the future. He shows no solace in any one political approach. In a way Joshi is unfolding the concept of Kaliyug (the age of Kali), or the last era of human civilization according to Hindu mythology.⁸¹ Kaliyug is characterized by the degeneration of the environment and of human nature and chaos in society, which is to be set right with the arrival of Kalki, the tenth and the last incarnation of Lord Vishnu, ushering the world into a new golden age. The chaos that blights the future India in the novel does imply some of these connotations.⁸² But, the novel refuses to fit into any

⁸⁰ The rebellion that started as a peasant protest against the corrupt landholding class, soon turned into an excuse for bloodletting. Sanjay Seth concedes in his essay, "From Maoism to postcolonialism? The Indian 'Sixties', and beyond," this spate of violent outbursts among the poor peasant class against the feudal landlords constituted an effort to reverse the power equation by annihilating and intimidating the landlords. According to the Naxalite ideology this act of violence, which often relied on common household tools as weapons, was essential to the process of establishing peasant supremacy. This movement was supplemented by a class of urban youth intellectuals, who engaged in destruction of educational institutions as symbolic strikes on the present system. After a while the movement lost its supporters in the intellectual world because of its excessive violence and aimless destruction, and was soon ruthlessly suppressed by the state authorities.

⁸¹ Not to be confused with the goddess Kali.

⁸² Ian McDonald's *River of Gods* also deal with this theme. In fact this book brilliantly interweaves the themes of a dystopic future, cybernetic simulacra, parallel universes and the myth of Kaliyug in its narrative that depicts the degeneration of nature and human dependence on machines.

holistic metanarrative such as religion or mythology that presume to explain real events through creation of predetermined patterns; rather, it eschews the connection between the real and the unreal in respect to history and narrativity. The book suggests that history is as much embedded in material reality as it is constructed from flow of information. It is a result of real people acting in real material conditions. But this history is also constructed from information gleaned and stored about these real material conditions; and the distortions in such information. At various points in the book the barrier between the real and the unreal collapses, and thus raises questions about the authenticity of history.

In the novel, the computer game *Megalopolis 3000* is the central, though not the only, device that insists on this point. This game is what Jean Baudrillard would describe as “simulacra of simulation” or the simulacra of the third order, “founded on information, the model, the cybernetic game—total operationality, hyperreality, aim of total control” (121). *Megalopolis* is conceived as a cross between role playing games (like the *SIMS*) and municipal strategy games (such as *Caesar* or *Pharaoh*) only on a much advanced level. In *Megalopolis* the characters and locations are real persons and places from each player’s individual life. Unlike the current games the environment does not depend totally on the AI, but individual inputs from the player. For example, when Para wants to replay the scenario of her grandparents’ first meeting she has to provide the program with all the minute details of the incident. The living world that the game creates is simulacra based entirely on information—information that the program received from Para, who procures it from her father, who again in his turn learnt it from his parents. Paresh in fact confesses that he made up a lot of the elements when he narrated the story to Para; there are also hints that the story that he heard from his mother may as well have been emotionally enhanced. However, the distance between the event and its simulacra does not create a clear boundary between the real and unreal; instead, the computer generated simulacra becomes the only real event that Para and Paresh can observe—the original event

dissolves into the plethora of information—information which are either empirical or imagined, information that are in themselves simulations. The further down the chain the reconstruction moves, the further it loses its affinity with the original. *Megalopolis* thus becomes the generator of simulacra of simulation.

Yet the totalitarian element of the game, the player's total control on the course of the events being played out, comes under some ironic treatment; especially in the matter that the first encounter between Mahadev and Suman (Para's grandparents) can only be seen from a horse's point of view despite Para's efforts to do otherwise. This element establishes the game's own logic that controls even the player.⁸³ The suggestion is very clear—people don't control technology anymore; technology controls people. This point is further reinforced by frequent overlapping of game scenarios and narratives of real events. During their meeting in a restaurant Paresh tries to re-dress Para in his mind from her air-force uniform to the dress of a normal girl, and realizes that he is not in the virtual world. The opposite happens when he replays an uncomfortable encounter with his mother regarding Anna's nude photography in *Megalopolis*—he exits the game when the situation gets out of control and reflects on the unavailability of such an escape key in real life. Although the novel suggests the existence of a boundary between real and unreal, at various moments it deliberately dissolves this boundary to indicate the propensity of the future.

In the matter of real and unreal Baudrillard (121) remarks: "There is no real, there is no imaginary except at a certain distance. What happens when this distance, including that between the real and the imaginary, tends to abolish itself, to be reabsorbed on behalf of the model?" He answers that the tendency is always towards disappearance of this distance which leaves no space for an "ideal

⁸³ Mention of the other game scenarios—the car-chase games and the flight simulator games—only reiterate this point.

or critical projection” (122), but that varies according to different orders of simulacra. Baudrillard continues that in the era of total information this gap disappears entirely:

The models no longer constitute either transcendence or projection, they no longer constitute the imaginary in relation to the real, they are themselves an anticipation of the real [. . .] and thus leave no room for any kind of imaginary transcendence. The field opened is that of simulation in the cybernetic sense, that is, of the manipulation of these models at every level (scenarios, the setting up of simulated situations, etc.) but then *nothing distinguishes this operation from the operation itself and the gestation of the real: there is no more fiction.* (122)

In certain ways *The Last Jet-Engine Laugh* is a product of the “implosive era of models” (Baudrillard 122) not only because it uses *Megalopolis* as a simulacra of history—which renders history and fiction the same. In this book the very act of telling, the “operation,” cannot be distinguished from the story itself. The projection of the idea of nation in this novel is not utopian where a “transcendent universe takes form” (Baudrillard 122), neither is it exactly an “unbounded projection of the real world of production” (Baudrillard 122); it is rather a work where the differences between past, present and future are carefully abolished; it is a work where story creates history, the future is already present in the past, and the present only acts as a point of narration. This book in a way reiterates Baudrillard’s claim that science fiction cannot exist anymore—we are living science fiction.

Nevertheless, the world today is far from reaching this perfect state of simulacra, especially the postcolonial world, where reality is too much dependent on day to day physical survival, not on flow of information—as Baudrillard would have it. Political strife and violence are all too real for people living in that world; they are neither hyperreal nor models; and people sometime do need transcendental imagination to dream of a promised millennium. Still, as Ralph Pordzik argues, postcolonial utopias or dystopias offer a “fictional strategy to disrupt the hierarchized relation between reality and fiction” (133) dominant in traditional utopian writing. In a similar manner *The Last Jet-Engine Laugh* employs its postmodern narrative techniques in a science fictional context in disrupting

the hierarchy of real and fictional; and this science fictional scenario enables a critical view of postcolonial history—of the past and of the future. The book employs the same postmodern techniques to stress the intrinsically mosaic nature of future Indian society.

The book emphasizes the dichotomy of pure Indianness versus complex postcoloniality through Para's concealing of her Indo-German origin to fit in with the doctrine of racial purity practiced by the Indian armed forces. Yet, in all its cultural aspects the novel is nothing but a profusion of multiplicity—Westernized urban culture, Indianized English language, and the interaction between Indian and European arts. In a way this text embodies the Bakhtinian heteroglossia. Not only does the novel exploit the socio-cultural assumptions of class language, but it also uses a “chutney” English consisting of English, French, German, Hindi, Bengali and Gujarati words, in the Rushdian manner to imply the essential mongrelness of the postcolonial Indian culture. Although creation of heteroglossia and hybridity is a marked feature of most postcolonial literature, the science fictional element enables this book to deploy them without any spatio-temporal constraints to project a future socio-cultural pattern. Not only does the novel engage into the discourse of the past and the present, but also about the imminent future. The novel neither foregrounds the Western/Indian dialectics as some other works do, nor does it make the purity/hybridity dialectics central to its concerns. Rather, this book takes those dialectics as preexisting conditions, and works towards constructing a world pivoting on those unuttered assumptions.

The protagonist Paresh and his daughter Para act as the axes on which the wheel of the story rolls. In his nationalist parents and his Westernized life style, in his Brahminical origin, in his love for Kolkata and his penchant for Italian coffee, Paresh is the quintessential high class postcolonial subject—turning and churning at center of all the contradictory forces. And Para is the future of such

subject hood—hybrid in her origin, highly influenced by her nationalist grandparents, acceding to the doctrine of purity, unflinching in killing the national enemy, yet ready to bend the rules to achieve her goals. Such amalgamated identities of the characters complement the collage like quality of the novel and its non-commitment to any form of unified ideology.

The novel suggests the futility or superficiality of the “ideology” of a pure India and plainly presents the “fact” of a hybrid nation. *The Last Jet-Engine Laugh* ultimately narrates a fiction which is the reality of the disillusioned postcolonial nation. Thus, this novel operates on a historical continuum that relocates the past and the present in context of the future. Rather than seeing the future as an outgrowth of the colonial past and postcolonial present, we interpret the past and present in terms of an imagined future. This postcolonial future differs markedly from those imagined by the hegemonic Western cultural discourse, yet shows an affinity to it. Therefore *The Last Jet-Engine Laugh* creates the discourse of the future in the context of Indian postcoloniality, and thus reframes the national identity in the light of a techno-scientific progress.

Future beyond the Nation-State: Strategies of Postnationalist Indian Science Fiction in *Generation 14*

Priya Sarukkai Chabria’s 2008 novel *Generation 14* represents the transition of postcolonial Anglophone Indian science fiction into the postnationalist stage. The novel moves beyond the usual East/West or master/slave binaries of colonial and postcolonial discourses and strikes at the root of all such binaries—the ideology of domination. *Generation 14* suggests that irrespective of time and place, oppression has been one of the prime characteristics of human society. However, the book asserts, that subversion of such dominant ideologies is also a primal human instinct. Following in the line of the Buddha and Gandhi, Sarukkai Chabria’s protagonist, Clone 14/54/G, locates possibility of salvation in human sympathy and in the adoption of a questioning attitude toward all forms of social hegemony.

By mapping the novel on Louis Althusser's concepts of Ideology and subject formation and Theodore Adorno's theory of genocide as complete integration of the Other, I argue that *Generation 14* makes a strong statement against ideological oppression, colonial or otherwise. I claim that though Indian history constructs the platform for this novel's futuristic world-society, *Generation 14* refuses to become a nationalist narrative. It rather critiques the history of oppression in the Indian subcontinent—social, political, religious and intellectual. By creating a futuristic dystopia where Indian forms of hegemony is combined with the Western forms, and by transferring the spatial location of this dystopia beyond India, *Generation 14* moves beyond the usual Indo-centrism of postcolonial Indian science fiction.

The primary stage of the book is set in the 24th century Earth, which with its highly neutral nomenclature and futuristic social structure apparently removes the novel from any specific cultural context. But, Sarukkai Chabria's infusion of Indian history through Clone 14/54/G's mental visitations places *Generation 14* deeply within the Indian tradition. The novel exposes the problems of conformism through a kaleidoscopic vision of the historical continuum—a vision that ranges from the earliest Aryan migrations into the Indus valley to the far future "Global Community." The book becomes at once a commentary on India of the past and the world of the future—a future towards which India, along with all the nations of the world, is moving. Although, this oligarchic, class segregated future is structurally very different from the tribal, feudal or imperial societies of the past, in essence they are all very similar: the common denominator being power over Others. The beings wielding power in this future are original humans or simply Originals, while those that serve them are all hybrid humanoid entities—Zombies (law and order), Firehearts (education and culture) and Clones (service and labor). The novel strives to bestow conscious agency on these suppressed entities and,

through its multiple narrative voices, implies that it is the propensity towards disobedience that can save the world from totalitarian traps.

The main action of the novel shows Clone 14/54/G going through a series physical and mental inquisition to bring out her original Aa-Aa's secret message. However, Aa-Aa's son, Leader (positioned highly in the Original hierarchy), and the Fireheart Couplet join 14/54/G in inciting a rebellion. The Clone also gets sexually involved with Leader and becomes pregnant with his child. This erotic relationship in a world devoid of such bonding among nonhumans slowly delivers her to a fuller understanding of human consciousness. At the climax of the novel the Clone delivers a message of compassion and acceptance and advocates equal human rights for all the species, principles that are exactly opposite of the dominant ideology of Global Community. The rebellion though fails for the time being and Leader is killed. Clone 14/54/G flees Earth along with Couplet to the dark side of the moon where the rebels are planning a counter attack.

The trials of the protagonists in the novel bare the process of implementing the dominant ideology on the subjects through the use of ideological and repressive state apparatuses in the manner formulated by Louis Althusser. According to Althusser the State is a "machine of repression" at the disposal of the ruling class that facilitates their subjugation of the working class. Typically this would be a capitalist bourgeois class exploiting the proletariat. Although this view of the state apparatus is thoroughly anti-capitalist, Althusser himself suggests that the structure and function of the state apparatus may be equally applicable to dominant ideologies other than capitalism.⁸⁴ In the Althusserian model the State power does not operate only through repression or violence. There is also the Ideological State Apparatus (ISA) that exerts ideological control. The Repressive State Apparatus

⁸⁴ Althusser says, "Even after a social revolution like that of 1917 [in Russia], a large part of the State apparatus survived after the seizure of State power by the alliance of the proletariat and the small peasantry" (134).

(RSA) consists of the Government and its various paraphernalia including courts, prisons, police, army etc. that usually works through physical force. Conversely, the ISA consists of any specialized institution that engages in the mental and ideological conditioning of the subjects—school, church, family, press etc.⁸⁵ The ISA and the RSA work in unison to impose the ideology of the dominant class that would create the environment of its own reproduction. In fact according to Althusser the ISA plays a more vital role than the RSA in creating this environment, because it manipulates the thought process of the individuals by marking them as subjects functioning within a particular ideology.⁸⁶

Althusser's formulation provides another insight into the heart of the ideological discourse:

“All these interpretations thus take literally the thesis which they presuppose, and on which they depend, i.e., that what is reflected in the imaginary representation of the world found in an ideology is the conditions of existence of men, i.e. their real world” (154). Nonetheless, the problem lies in the fact that ideology represents to the men not their real condition of existence but their *relations* to the conditions represented in the imaginary form. To put it differently, all ideologies are constructs arising out of certain *perspectives* and based on certain *assumptions* about the *real* world; ideologies thus construct *imaginatively* structures of relationship between human beings and their environment. However, these perspectives and assumptions may not correspond empirically to the factual world.

⁸⁵ Althusser comments:

The role of the repressive State apparatus, insofar as it is a repressive apparatus, consists essentially in securing by force (physical or otherwise) the political conditions of the reproduction of relations of production which are in the last resort *relations of exploitation*. Not only does the State apparatus contribute generously to its own reproduction [. . .] above all, the State apparatus secures via repression (from the most brutal physical force, via mere administrative commands and interdictions, to open and tacit censorship) the political conditions for the action of the Ideological State Apparatuses. (142)

⁸⁶ Moreover, according to Althusser individuals can function only within an ideology because it recognizes them as distinguishable and irreplaceable subjects. The act of this recognition is the interpellation of the subject. However what seems to take place outside ideology actually takes place inside it; there is no outside to ideology from the point of view of the subject. Any individual is always already within ideology. Any action he performs, each ritual he takes part in, any communication he engages in interpellates him in ideology. Ideology becomes the unconscious part of the subject's existence.

This is the center of all ideologies; and this is the point that Sarukkai Chabria challenges in *Generation 14*. She seeks to expose the constructedness of all forms of social hierarchy, be it Western or Oriental in its origin. She equally censures colonial domination, class segregated capitalist society and caste based oppression. By weaving both Indian and Western forms of ideological discourses into the structure of the novel Sarukkai Chabria anticipates a futuristic society where nationalism and territorial politics have been replaced by newer but even more sinister forms.

The primary RSA in the Oligarchic Global Community is the species of Zombies following and imposing rules—physically, technologically and mentally. Zombies work as supervisors to the Clone work force, as law officers and as overseers of any job that do not require direct human involvement. This RSA is supplemented by even more efficient ISAs. The primary ISAs that keep the non-human population in line is the rituals: kowtowing to superiors to maintain a distinct chain of command, always submitting to the Originals by considering them as superior beings, the fanfare with which the Originals maintain their decorum and social position, and chanting the line, “The Global Community is always right. Long live the Global Community.” These rituals brand the population as subjects contained within the ideology of the Global Community. The Originals too must conform to this chain of command. Clone14/54/G’s observations of the school for human children provide the best instance of such ideological interpellation. The children learn (in their school song) as their lesson that the Originals are meant to subjugate the rest of the humanoid population:

We are Originals, we’re the Best.

We’re kind, we rule at other’s behest.

Firehearts are liars we suppress

Or The Truth they will repress.

Strong Zombies we keep in check

Or our Order they will wreck.
Clones are those we guide and shield,
They must work or to death yield.
The mutants too we put away
For they are ill and shouldn't stray.
This we do for the common good
And not from hatred, it's understood! (236)

The song also defines the role of each species in the society. The Firehearts represent the intellectual class; the Zombies stand for the law keepers; and the Clones correspond to the working class. The Originals implement their hegemony not only through the forcible working of the RSAs and the ISAs, but also, as the song suggests, by providing leadership to the society.

The revolution in *Generation 14* seeks to break out of this ideological domination of the hegemonic Originals. However, the rebellion depicted in the book clearly displays a belief in a more holistic revolution than a revolution purely by the proletariat. Although the mass support for the revolution comes from the Clones and Clone 14/54/G plays an instrumental role in this uprising, it is actually planned by the dissenting Original, Leader, with the help of Firehearts such as Couplet and Blank Verse. Furthermore, 14/54/G's efforts for the rebellion are generated by the Original Aa-Aa's philosophical stance. In schematic terms this revolution can only take place with the leadership of the ruling class and with the support of the suppressed intellectuals and dissenting law officers. In other words, the proletariat needs to be led by the intellectually superior classes to bring about a successful revolution. This is somewhat different from the Marxist ideal of worker's revolution. It is rather like the revolutions in the colonies where the intellectual classes lead the rebellion supported by the

workers to bring about a successful socio-political change.⁸⁷ Perhaps the revolution in Sarukkai Chabria's book fail because enough number of the suppressed intellectuals and the Originals are yet to realize the oppressive nature of their society and enough number of Zombies and Clones are not ready to disobey command. The only Original in the revolutionary camp is killed. Yet, Couplet flees with Clone 14/54/G, who is pregnant with Leader's child, to sustain the possibility of a future uprising.

Nonetheless, the Gramscian concept of unconscious acceptance of the ideology of the dominant class as the ideology of their own by the suppressed mass is given a further twist in this book. All the humanoid species are genetically altered in a way that they literally become dependent on the Originals for proper leadership. Even though the Global Community metaphorically stands for a class segregated society, it puts its subjects into the dominant ideology quite literally before their birth. Like Isaac Asimov's laws of robotics that prevents a robot from harming human beings, genetic manipulation makes the nonhuman entities instinctively subservient to the Originals.⁸⁸ The novel asserts that this type of domination tactics that seeks to achieve an overwhelming controlling power by segregating the oppressed population has been instrumental to the hegemonic regimes over time. The book stresses that the majority of the ruling class is also deluded by a sense of righteousness by clinging on to the dominant ideology, while the reality of the state of affairs gives a completely different account. To have an oppression free society the people need to break free of the ideological constructions which aid the ruling class.

⁸⁷ In this context the 1857 Indian mutiny against the British can be cited. Although the Indian soldiers of the British army started the mutiny, they very quickly yielded leadership to the indigenous elite like Nana Sahib, Rani Lakshmi Bai and Emperor Bahadur Shah Zafar.

⁸⁸ In his 1942 short story "Runaround" Isaac Asimov formulated the three laws of robotics that govern human AI relationships in his fictional universe, mostly in his later Robot series but as well as in Foundation series. The three laws are:

1. "A robot may not injure a human being or, through inaction, allow a human being to come to harm."
2. "A robot must obey any orders given to it by human beings, except where such orders would conflict with the First Law."
3. "A robot must protect its own existence as long as such protection does not conflict with the First or Second Law."

On a different level *Generation 14* does not only engage in the discourse of class, but also in the discourse of caste. Although there are some differences between the concept of social class and the concept of Hindu caste, this novel creates a world where class and caste are almost synonymous. “Class” connotes a common socio-economic status of a group of people in the world of production, affiliation to which can be gained or lost by individual members through their personal efforts. Conversely, the concept of Hindu caste system, at least in its present form, places individuals in their assigned position in the society by their birth. In other words under the caste system the individuals cannot get rid of their caste affiliation by their own agency (except under rare occasions). Yet, the caste system was based primarily on the individual’s role in the chain of production in the ancient Hindu society, which originally was fluid enough to allow some form of inter-caste movement. But, with time this system became rigid and oppressive. However, as concepts in their present forms both systems function on the same principles of hegemony of the superior social groups. Again, both the concepts of class and caste can find echoes in the relationship of the colonizers and colonized people. Colonialism is both an economic and a racial discourse, marked by the domination of one group over another.

In *Generation 14* the two different concepts of social class and Hindu caste converge. The social divisions are rigid, based on each group’s role in the system of production; each group is even allotted separate habitat area. But this division is not a fluid one; rather it is genetically engineered at birth, which the groups cannot undo. The Clones are made for the purpose of menial work, the Zombies are made for fighting, the Firehearts are made for intellectual labor, and Originals control all of these species and rip the benefit of their labors. Curiously though, the Global Community neither corresponds perfectly to class based Capitalist society, nor exactly to the caste based Hindu society. On the one hand, this society seems to have outgrown the money based economic system that needs a market for the products it produces. On the other hand, the groups in Global Community do not exactly

follow the four castes of Hinduism. While the Clones are undoubtedly the Shudras (the untouchables), the other three groups exhibit mixed characteristics. The Originals, who are on the top of the pyramid, correspond to the Brahmins (the priests and the scholars); yet as controller of all the actions in the practical world, they also correspond to the Kshatriyas (the rulers and warriors). The Zombies are obviously warriors and supervisors in small matters, which relate them to the Kshatriyas; yet, they lack any self will and real ruling capabilities to be identified as real Kshatriyas. The Firehearts in their capacities as poets and scholar share the qualities of Brahmins; but, they are constantly controlled by the Originals and in some cases by certain Superior Zombies. None of the groups practically correspond to Vaishyas (the traders and craftsmen). This again points out the lack of a market based economy. However, such anomalies with present social divisions only indicate estrangement and the propensity of the future forms of oppression.

These anomalies also suggest the pervasiveness of the human instinct to dominate others—irrespective of temporal, spatial, cultural, religious and racial differences. The book shows through the conflation of the class and the caste systems that both Western and Indian modes of hegemony ultimately serve the same ideological purpose. This point of view is repeatedly emphasized by the references to Indian history and allusions to the various kinds of past oppressions—foreign invasions, religious tyranny, ideological control, gender repression, and colonial subjugation. This text, like many other postcolonial Indian science fiction, stresses that this trend of violence is not purely imposed by the European colonizers. Sarukkai Chabria also links these past repressions to the future of humanity, which very clearly depicts Western modes of domination—especially in the context of the industrial labor force and their robot like existence. The linking of these two apparently different kinds of social evils moves the novel beyond the discourse of Indian nationalism that posits the Indian tradition as a

form of resistance against Western imperialism. Such a connection rather places *Generation 14* into a discourse of universal resistance against all forms of oppression.

However, the novel achieves this goal not only through its thematic politics, but also by weaving this politics into its narrative structure. Although the novel is divided into seven chapters, structurally it can be carved up into two major sections. Section one, consisting of the Prologue, chapters I through V and chapter VII, are first person narratives of the central character, Clone 14/54/G, and are located in the 24th century Earth. The second section consists of only chapter VI, which presents a kaleidoscopic view of Indian history through a conglomeration of first person narratives. The points of view that the novel presents to its reader advocates diversity and difference. The major narrative voice is that of a Clone, not an original human's. The points of view in the visitations are however even more curious: nonhuman perceptions are indiscriminately blended with human points of view. The narrators in this chapter are a parrot ("The Watcher"), a fish ("Illusions"), a wolf-dog ("The Crossing") along with three human beings ("The Sentence," "The Painted Caves" and "The Edict"). Together with the visitation from the point of view of a lizard (in chapter I) these nonhuman perceptions give the novel its structural diversity that ultimately adds up to a final statement of chaos and rebellion against the forces of unitary power. In a way such iteration of multiplicity aligns this novel with other Anglophone Indian science fiction texts that also makes strong statements of a hybrid future. However, the diverse historical and temporal markers also make *Generation 14* a text that consciously goes beyond confines of national cultures.⁸⁹

⁸⁹ Furthermore, these "visitations" reinforce one of the major themes in the novel: art and imagination as ways to escape the shackles of routine and mechanical life. *Generation 14* shows poetry and literature as tools of subverting ideological domination; and by doing that it also draws attention to the genre of Indian science fiction in a self referential manner—after all a major characteristic of this genre has been challenging of various kinds of ideological control. Literature not only speaks the truth that the authorities try to suppress, but also stirs up emotional responses among its audience. The novel

Furthermore, these “visitations” not only make the novel a conglomeration of first person narratives, they also turn it into a crossbreed of generic qualities. While the overall structure of the book is that of science fiction, those of the visitations often display more fantastic and fable-like qualities. The first level of estrangement that informs these visitations is the detachment of them from Clone 14/54/G’s reality. When it becomes apparent that the Clone is somehow involuntarily tapping into the literary memories of her original, Aa-Aa, these visitations become linked to the history of India that Aa-Aa was using for her literary compositions or “voice-tombs.” However, these historical visions rather than being unbiased documents are subjective perceptions of a writer. This is a second degree of estrangement. Yet, the final level of estrangement that marks half of these visitation pieces as fantasies occur in the nonhuman narrative perceptions in the mind of the humanoid subject. In “The Watcher,” “Illusions” and “The Crossing” Aa-Aa, and through her 14/54/G, narrates the world from the points of view of animals. This is much similar to the animal fables or to fantasies where the author takes up the persona of animals without rationalizing any basis as such. Inclusion of these short digressive pieces into the main narrative denotes the whole novel as a generic composite—a dominant characteristic of Anglophone Indian science fiction.

What is more, the whole novel can be seen as reinventing the form of Buddhist *Jataka* stories, with the Clone 14/54/G being the final incarnation, the Buddha or the enlightened one, bringing the message of deliverance.⁹⁰ According to the Buddhist religious texts, the *Tripitaka*, each Bodhisattva, or the heavenly soul with potential for achieving nirvana, goes through multiple cycles of rebirth

depicts literature and imagination as ways to the emotional mutation of the female Clone 14/54/G, which leads to the stirring up of the other creative force—sex and procreation—that finally pronounces it as a human.

⁹⁰ *Jataka* refers to a large body of tales that narrates the past lives of the Buddha. According to various sources this tradition contains about 500 to 547 tales. See C. B. Varma’s “Introduction” to *The Illustrated Jataka and Other Stories of the Buddha* archived in Indira Gandhi National Centre for the Arts Digital Library (<http://ignca.nic.in/jatak.htm>) for more details.

before attaining the final status of Buddha or enlightenment, after which the soul is set free from all earthly bonding.⁹¹ These incarnations can be human or nonhuman—supernatural beings as well as animals. The *Jataka* stories narrate about these previous incarnations of the Buddha. Although according to the *Buddhavamsa* and other Buddhist literature in Pali this process is the same with all the Buddhas that appear in the world, the *Jataka* stories are associated primarily with Sakkamuni Gautama Buddha, the 25th Buddha according to *Jataka Atthakatha*.⁹²

In *Generation 14* the link with *Jataka* stories and tales of Buddha are not overt or even one to one; but it is a rather muted presence throughout the structure of the book. The novel presents a 14th generation Clone to deliver a message of compassion to a world suffering from a stratified class society that is in essence similar to the caste bound Hindu society of the fifth century BC, when the religious reformations like Buddhism and Jainism became a necessity to address the evils of religious oppression. Similar to the Buddhist belief in cyclic rebirth to attain pure Enlightenment the genetic profile of Aa-Aa goes through fourteen generations of cloning to achieve the status of a full human and to realize the full scope of humanity. Furthermore, the short visitation pieces of chapter VI are much similar to the concept of the Buddha's recollections of incidents of his previous life. Here the *Jataka* tradition is even more prominent as each visitation contains some kind of moral that ultimately points towards the inevitability of oppression in the world.

The animal perspectives that the Clone experiences in this story is another point that very strongly links the novel with the Buddhist tradition: like many of the previous incarnations of the

⁹¹ The *Tripitaka* consists of three different “pitaka” or collections, *Sutta-Piataka*, *Vinaya-Pitaka* and *Abhidhamma-Pitaka*, collected in the 5th century BC India. See Varma for further explanation.

⁹² According to *Jataka Atthakatha* the 25 Buddhas are Dipankara, Kondanna, Mangala, Sumana, Revata, Sobhita, Anomadassi, Paduma, Narada, Paduma, Uttara, Sumedha, Sujata, Piyadassi, Atthadassi, Dhammadassi, Siddhattha, Tissa, Phussa, Vipassi, Sikhi, Vessabhu, Kakusandha, Konagamana, Kassapa, Gotama.

Buddha the Clone goes through metaphoric cycles of reincarnation many of which are as animals. In fact in “The Watcher,” where the 14/54/G experiences the world through the eyes of a parrot kept in a golden cage in an aristocratic household of the Nawabi Lucknow, is much similar to the Buddha’s incarnation as a parrot in a golden cage in the palace of a king in “Radha Jataka.”⁹³ Again, 14/54/G’s experience of the world as a fish in “Illusion” is similar to the Buddha’s incarnation as a giant fish in “Matsya Jataka.”⁹⁴ The Clone also sees the world as a lizard in chapter I which echoes the Buddha’s incarnation as an iguana in “Godha Jataka.”⁹⁵ These associations with the history of Buddhism, I argue, work as subtexts of ideological resistance that the novel as a whole engages in.⁹⁶ Furthermore, by locating this discourse of oppression and resistance within the Indian history, Sarukkai Chabria, like

⁹³ According to Varma’s retelling, in this story Bodhisattva was born as a parrot and, along with his brother, was placed in a golden cage by a king. They were displaced from favor by the appearance of a pet gibbon, but were ultimately restored to their original place through the base antiques of the gibbon itself.

⁹⁴ See Varma’s “Story of the Mighty Fish” for more commentary.

⁹⁵ See “Godha Jataka” in Robert Chalmer’s translation of *The Jataka* (<http://www.sacred-texts.com/bud/j1/index.htm>). In addition to these animal perceptions Aa-Aa’s death by treachery for disregarding the totalitarian system has resonances from the death of Matanga, Buddha’s incarnation as an untouchable, who revolted against the system and was killed treacherously by a king’s assassins. Matanga’s rise from untouchable status to that of a Brahmin also corresponds to 14/54/G’s transformation from a Clone to the full sensibility of a human being.

⁹⁶ However, while the actions of the Bodhisattva in *Jataka* exude wisdom in various manners, the visitations in the novel generally end in some type of violence: the parrot is smothered to death (“The Watcher”), the guard that stole the jewel is about to be executed (in “The Sentence”), the ascetic fish is caught in a fishing hook (“Illusions”), a mother from Kalinga is dumbstruck by the devastation wrought by war (“The Edict”), and the wolf-dog smells the death of his master after a battle (“The Crossing”). The only piece associated directly with Buddhism, “The Painted Caves,” somehow escapes the element of tyranny. Rather, this tale reconciles with a major aspect of the text—the value of art in recording and expressing human emotions, which at times approaches the divine. The all pervasive presence of the painted images—in the caves and in the outside world—along with the various stories conveying Buddhist morals reinforce the role of art and literature as a liberating force. The same strain runs throughout the main action of the novel. Not only is the Clone subjected to visitations that are literary in their origins, and her original is a writer, but also 14/54/G’s own development from the status of a Clone without any memory or emotional responses to that of a human with full emotional sensibility is catalyzed by a literary process. This process starts with the memory of Aa-Aa’s literary works and finds fruition in the creation of 14/54/G’s own poetry. Both 14/54/G and her original Aa-Aa are poets and writers who can feel the injustices of the 24th century world that degrades humanity of the sentient beings other than the Originals. Rather than being warriors in the literal sense, they indict these injustices through their literary works, the final proclamation of which signals the climax of the novel, when 14/54/G shouts to the celebrating audience—“Remember with me: I am a human being; I claim my birthright to be a human” (272). This idea is further strengthened by the character of Couplet and the whole species of poetically inclined Firehearts.

some of the other authors of Anglophone Indian science fiction, holds up the hegemonic propensity contained within the Indian traditions. Yet, as our earlier analysis of ideological subject creation and hegemonic class superiority suggests, such allusions to Indian history are intertwined in the novel with forms of oppression clearly reminiscent of Western totalitarianism.

This allusion is especially prominent in the programmatic alteration of the past through physiochemical and ideological manipulation of the various humanoid species that reminds of a *1984*-like totalitarian society. The use of culture as a device of ideological propaganda is also reminiscent of Communism, Nazism and even Colonialism. The Firehearts, who are of poetic inclination and cannot speak but truth, are used as inquisitors of subversive elements. They are also forced to create propagandist literature and are subjected to frequent memory alteration to correspond to the truth of the Global Community. Yet, in spite of various constraints the Firehearts and the Clones revolt against the authority of the Originals inspired by 14/54/G's poetic and philosophical exhortations. Sarukkai Chabria's point here is very clear. She censures authoritarian hold over creative energy and censorship of art. The novel makes it obvious that despite restraints art and literature seeks out ways of subverting control, even at great personal expenses of the creators.

This stance against authoritarianism is further emphasized by bringing in references to Gandhi's derelict house in the urban ruins of western India, which 14/54/G and Leader visits. Mentioning Gandhi in the text serves two purposes: it alludes to his nonviolent rebellion against the British colonizers in India; it also refers to his advocacy of the rights of the suppressed lower caste population of the country. However, the forgotten memory of Gandhi suggests that both those aims were not really met in the future world. The caste system prevails in its new incarnation as does the Western mode of systematic class dominance. This futuristic scenario though is not only a criticism of

both the Western and the Indian ideologies of dominance; it is also a critique of the modern Indian nation. Although the country has achieved independence from the British colonizers, it is still struggling with various kinds of oppression. Gandhi's principle of non-violence, which stood in extreme contrast to British violence, has all but been forgotten. His dream of achieving emancipation for the "untouchables" too has succeeded only when enforced by law.

Yet, Sarukkai Chabria seems to highly value Gandhi's mode of non-violent revolution. Both Aa-Aa and 14/54/G's resistances to oppression take a peaceful path. They both go through extreme mental agony and persecution, yet never get tempted to violence. Even Aa-Aa's public assassination echoes Gandhi's own death. The subtle use of the tales from *Jataka* in the structure of the book also underlines Sarukkai Chabria's preference for such non-violent and alternative modes of resistance. However, *Generation 14* also suggests that unless the population realizes the hegemonic tendency of all dominant ideologies, no resistance can succeed. Perhaps that is the reason Sarukkai Chabria incorporates armed uprising in her scheme of things.

The novel though fails to present the proper formula of a successful revolution. The elements of force and love are both at hand to topple the iron reign of the selfish godlike Originals, yet they seem not to have enough of both so far to succeed. It is as if Prometheus hasn't been unbound yet from his chains and Demogorgon and Asia arrived at the wrong time to dethrone Jupiter from his jealous sway.⁹⁷ Still the prospect of a child's birth conceived between an Original human and a Clone bodes

⁹⁷ In P. B. Shelley's *Prometheus Unbound* (1820) Jupiter is dethroned from his cruel rule over heaven and earth by of an unbound Prometheus. The lyrical drama shows Prometheus being accompanied by his consort Asia, while Demogorgon arrives at the moment of deposition. This lyrical drama is a symbolical representation of a successful revolution, with allusions to past revolutions and bloodsheds (most notably the French revolution). Prometheus can be seen as the representation of the revolutionary power, Asia as love which, according to Shelley, must accompany the moment of bloody revolution to make it into a successful overthrow of oppression and Demogorgon as the unconscious political will of the people.

renewed hope for the future. It is also an assertion of a future that recognizes multiplicity and difference. The repeated allusions to Indian past that shows coming of the Aryans into a non-Aryan land, and presence of various non-Hindu cultures in the Indian subcontinent, support this future statement of plurality and flux, which is a major characteristic of Anglophone Indian science fiction.

This recognition of hybridity also leads to another characteristic that abounds in this genre—a critical awareness that arises from its presence at the center of the double dialectics between Oriental and Occidental cultures and between indigenism and hybridity. The book’s structure incorporates Indian narrative elements in the form of *Jataka*, and, according to the author, use of various Rasa in portraying certain emotions in the “Visitations.”⁹⁸ But, as has already been discussed, the book also follows in the path of Western dystopic science fiction in painting a gloomy future. *Generation 14* also merges various Western and Indian social, cultural and political trends to create its unique view of the future. On the one hand by referring to Gandhi and the Buddhist traditions the book poses an alternative mode of existence to the all encompassing tendency of Western imperialism reflected in the Global Community. On the other hand, it presents a scathing critique to the discourses of Hindu orthodoxy by positing the class segregation in the future world as another form of caste system. Furthermore, as is evident from the discussion, the book rejects the notion of a pure India in its depiction of Indian history. *Generation 14* thus functions within this locus of the dialectical forces to provide a critical vision of the future world.

⁹⁸ In an email communication with me Sarukkai Chabria says:

[. . .] in these stories I was working with Bharata's rasa theory, focusing on a single emotion as the *sthai bhava* (dominant emotion) in each story. e.g. the oppressive wealth of the Vijaynagar Empire lent itself as a setting for exploring the emotion of *bhayanaka*/fear while the wondrous tales painted in the Ajanta caves made *Flying a child full of adbuta*, while *sringara* was dominant with the parrot etc.

However, as a critique of ideological domination the novel also displays characteristics similar to Adorno's negative dialectics. Rather than enforcing the positivistic synthesis of Hegelian dialectics, *Generation 14* uses dialectics as a mode of asserting difference—non-identification with the dominant mode of thinking.⁹⁹ In every aspect of the novel, both thematic and structural, this assertion of difference is prominent. Hybridity here is not only a coming together of various influences, Indian and Western, to create a composite whole;¹⁰⁰ it is also an acknowledgement of the differences that come into conflict in the instances of social and political collision. According to Adorno, such impulses of domination would not exist under ideal conditions.¹⁰¹ However, such ideal conditions do not exist in the real world; nor do they exist in the universe of *Generation 14*. Like in Orwell's *1984*, the political hegemony in Sarukkai Chabria's book seek complete integration of the subject into their ideology and to eliminate any discrepancy and difference—all Others must be eliminated.

This critique is most blatant when *Generation 14* describes the “Exemplary Massacre of The Others.” The Fireheart Couplet explains the concept to Clone 14/54/G in their conversation:

“Who are The Others?”

“Anyone—or any group—they designate as ‘The Others’. There are no markers to identify The Others. It's arbitrary, and keeps changing with each victory and each Celebration.” [. . .]

“What have The Others done?”

“Nothing in particular, Clone. [. . .] But The Others live, don't they? And they shouldn't! That's their crime. [. . .] They are those who never can be saved!” (270)

⁹⁹ In *Negative Dialectics* Adorno says, “The contradiction is the nonidentical under the aspect of identity; the primacy of the principle of contradiction in dialectics tests the heterogeneous according to unitary thought. By colliding with its own boundary, unitary thought surpasses itself. Dialectics is the consistent consciousness of nonidentity” (5).

¹⁰⁰ This hybridity also goes beyond Bhabha's sly postcolonial subjecthood.

¹⁰¹ Adorno states, “In view of the concrete possibility of utopia, dialectics is the ontology of the false condition. A right condition would be freed from dialectics, no more system than contradiction” (*Negative Dialectics* 11).

Generation 14 fully depicts the authoritarian tendency that persistently marginalizes the social and political Other and at the same time rejects the possibility of human individuality—the ultimate culmination of Western rationality—full integration of the individual into the system through death. This is what Adorno called, “Genocide is the absolute integration” (*Negative Dialectics* 354). However, the book suggests that this tendency of full integration and genocide is not only a culmination of Western forms of political ideology, but of any ideology that forces itself into hegemonic position. Every form of domination seeks to destroy whatever is different.

Sarukkai Chabria locates proper form of critical discourse in the human attitude that questions all form of authoritarian structure and looks for salvation in human sympathy that accepts difference. *Generation 14* thus in a way projects the voice of a future prophet who follows in the line of the Buddha and Gandhi. This prophet, 14/54/G, fails in the face of dominant forces, as did the previous ones. Nevertheless, the book does not totally lose faith in human understanding, and hints at further efforts in the future to combat oppression. Consequently, *Generation 14* depicts a future that not only presents a postcolonial critique of imperial supremacy, but a challenge to any form of ideology that seeks to impose itself on the subaltern classes, whatever guise that may take—religion, politics or nationalism. It is obvious that the novel is much invested in exploring the social outgrowths and extrapolations of Indian milieu in the far future. Nevertheless, Sarukkai Chabria makes it very clear that such a future would not be concerned only with the Indian national identity, but with the general human condition.

Native Aliens: the Politics of Reconciliation in *Of Love and Other Monsters* and *Distances*

Vandana Singh's novellas *Of Love and Other Monsters* (2007) and *Distances* (2008) explore hybrid identities and the resultant anxieties of alienation in the postcolonial immigrant context.¹⁰² Singh's novellas however deal not only with the identity politics of marginalized subjects, but also employ dialectical tactics to reject Manichean binaries. These works project the postnationalist future of Indian English science fiction, where, like *Generation 14*, India itself dissolves as a national identifier and emerges more as a cultural and philosophical inspiration. Thus, these texts, especially *Distances*, place themselves within the double dialectics of Indian science fiction in a more tangential manner than the rest of the books under consideration. The temporal and spatial displacements in the novellas along with the futuristic scenarios evidently place these works in the conversation of postcolonial tomorrows, which in Singh's syncretic vision assume forms that resolve the insider/outside splits of colonial and postcolonial discourses.

The identity politics and alienation that *Of Love and Other Monsters* (*OLOM* from now on) and *Distances* deal with are not only results of postcolonial mimicry (as propagated by Homi Bhabha), but more of a Fanonian split-personality, accentuated and compounded by politics of belonging.¹⁰³ These texts question the very legitimacy of all such values as originality, purity and belonging. However, all such claims are also supplemented by the problems of the derivative, the mongrel and the rootless. I claim that such cohabitation of opposites not only places Singh's texts at the center of the double

¹⁰² Being parts of Aqueduct Press's Conversation Pieces Series edited by L. Timmel Duchamp, which focuses on feminist science fiction, both the books also address issues of gender and advocate acceptance of difference.

¹⁰³ In *Black Skin, White Masks* Fanon proposes that colonial man suffers from the neurosis of dual identity which alienates him within himself leading to an arsenal of complexes that keeps him chained to his role as the inferior person. Fanon declares that his aim is to free the black man of his complexes and disalienate him.

dialectics of Indian science fiction, but also highlights the ability of science fiction as a genre that can reconcile opposites.

Richard Larson and Dan Hartland, the reviewers of *OLOM* and *Distances* respectively, aptly commented on separate occasions that despite being quintessentially Indian these stories are more about estrangement than about India. Although the actions in *OLOM* take place in contemporary India and the USA, *Distances* (set on an alien planet with humanoid aliens as its protagonists) is totally post-human in its orientation. However, despite the differences in their spatio-temporal settings both these texts foreground the native/settler binary to engage with the discourse of alienation. Both the books ask the questions raised by postcolonial theorists such as Mahmood Mamdani and Pal Ahluwalia: when does a settler become a native? Or can a settler ever become a native? These questions not only complicate the binary relationships of imperial power structures but also interrogate the identity of the native. Mamdani says:

Settlers are made by conquest, not just immigration. Settlers are kept by a form of the state that makes a distinction—particularly juridical—between conquerors and conquered, settlers and natives, and makes it the basis of other distinctions that tend to buttress the conquerors and isolate the conquered, politically. However fictitious these distinctions may appear historically, they become real political facts for they are embodied in real political institutions. (Qtd. in Ahluwalia 500)

In “When Does a Settler Become a Native,” Ahluwalia reiterates Mamdani’s question in discussing the debate in the Australian context. He claims that the settler societies usually adopt an assimilative character, yet are still dominated by the conqueror’s identity out of a sense of fragile bonding and imperial allegiance, an allegiance that has already been contaminated. He explains, in these societies “national identity is not homogenous but rather is constantly invented” (507). The marginalized groups, including the immigrants and the aboriginals are encouraged to mimic the dominant settler culture to become a native.

This concept of culture, mongrel in origin yet presenting itself as something unadulterated, is almost like a simulacrum. The source for this cultural space is intangible; thus mimicking this cultural construct is like copying something which has already lost its original. Search for this simulacrum results in the loss of all such values as origin, purity and organic identity. Singh's novellas, however, problematize the concept of this simulacrum. For her characters the settler/native question is more personal than political, and though some of her characters' identities are "overdetermined" by outside forces, these characters also help shape the contours of the forces that create their identities.¹⁰⁴ Thus, Singh's novellas do not assume that the settler/native binary essentially leads to a cultural "simulacrum;" rather, She sees them as dialectical forces synthesizing new identities. Such identities, I argue, ultimately anticipate in a symbolic manner the future trends of postcolonial India. The two books however take two very different paths to articulate these concerns.

OLOM tells of a shape-shifting alien trapped in the body of an Indian man (Arun). He has lost his previous memory in the process of his incarceration within the human body and can only feel his strangeness through his extraordinary mental powers. There is only one other being of his race on earth, also in the disguise of an Indian man (Rahul Moghe), who still possesses the full psychic ability of their race. However, when Rahul Moghe tries connecting with Arun, he gets scared by the possibility of the immense damage that Rahul can do to humanity. The narrative takes Arun from India to the USA pursued by Rahul and again back to India, where he finally contacts Rahul and learns that their race came to earth in the distant past to colonize the natives; but, the semi-corporeal colonizers

¹⁰⁴ In *Black Skin, White Masks* Fanon says in context of the objectification of the black man in white society, "I am given no chance. I am overdetermined from without. I am the slave not of the "idea" that others have of me but of my own appearance" (116). The situation is somewhat similar in *Distances* with the green girl Anasuya. However, she literally reshapes the concept of reality for her adopted society.

lost contact with the mother planet for eons and merged permanently with the local life forms.¹⁰⁵ Rahul expresses his intent to free the colonizers of native elements and take them back to their home world. Arun semiconsciously leads him to the trap set by the society of alien hunters, who burns (literally) Rahul into a timid human being.

The story explores Arun's sense of estrangement at different levels—physical, social and psychological. Arun discovers that he has the ability to understand a person as completely as possible by seeing through his or her mind;¹⁰⁶ he also discovers that almost no one has his abilities, and, thus, feels alienated from society. On another level, he feels a complete disregard for the human gender distinctions, and comes up with the theory that humans possess thirty four climactic zones of gender characteristics, not just two. At certain points he feels trapped within the male body, especially when he falls in love with the male scientist Shankaran's mind. Yet, a final level of estrangement comes at the end of the book, when Arun feels alienated from his own self as a human and also from his own self as an alien. His betrayal of Rahul Moghe for the benefit of the human race doesn't end this conflict.

The merging of the alien into the native in *OLOM* interrogates the identity politics of the postcolonial world. The aliens are the conquerors, but at the same time they are the ones who have been altered by the conquered people. They are the settlers, yet they cannot be separated from the natives. This sensibility is most acute in Arun, who has the physical attribute of the native, yet possesses the mentality of the settler, and thus, is estranged in his own hybrid self. What is important here is to realize that Singh sees the discourse of colonization not as one way traffic. The conquest

¹⁰⁵ This is very similar to Jack Finney's *Body Snatchers* (1955) where "pod people" take on the bodies of the humans.

¹⁰⁶ In some instances he can also touch animal minds.

aspect of settler/native relationship, so much emphasized by Mamdani, is much more muted and complicated in Singh's stories. In a way Singh is reiterating and reinforcing the ambivalence of colonial discourse formulated by postcolonial theorists, especially by Bhabha in his iteration of hybridity of national cultures and the concept of non-dialectical Third Space—a differential space that allows commenting on the state of postcoloniality without imposing transcendental dialectics. Rahul Moghe's agenda of taking back the settlers to their home world and controlling earth falls in line with a straightforward colonizer/colonized discourse. But his inability to differentiate the settlers from the natives proves that there is nothing straightforward in such relationships. This same grayness of the settler/native dichotomy is also apparent in Arun's dilemma—whether to identify with the humans or whether to show solidarity with the aliens.

Such dilemma bred by the settler/native binary as present in *OLOM* finds echoes in most other postcolonial narratives—both mimetic and non-mimetic. Andrea Hairston's "Griots of the Galaxy" offers an almost identical dilemma, where a race of body colonizing aliens refuses to go back to their home world and settles down on earth. Their long inhabitation of different bodies on earth makes them lose any concept of pure identity just as Arun loses his sense of pure identity influenced by his human body. *OLOM* is also similar to Josef Conrad's *Heart of Darkness*, where the white man Kurtz becomes heavily influenced by the "dark spaces" of Africa and succumbs to despotism.¹⁰⁷ Marlowe's futility in bringing him back to Europe in a way signals the claim of the colonizing space on the colonizer. However, what appears as an inconceivable negative influence in *Heart of Darkness* written by a white European becomes a legitimate claim in the texts produced by formerly colonized people. Conquest is

¹⁰⁷ *Heart of Darkness* has been criticized for its stereotypical colonial assumptions. Although the novella is much sympathetic to the cause of the colonized people and criticizes colonial forces, postcolonial critic Chinua Achebe accuses it of racism and succumbing to the established notion of Africa as the Dark Continent, uncivilized and breeding despotism even among the educated Europeans.

important in this discourse. But, as *OLOM* shows, it is not the sole issue. After a certain point the settler tends to create a new identity of himself as a native. This identity is definitely not the same as the original native's, but it is also not the same as the original settler's. It is a new fusion of different identities. Yet, Singh here also raises the question of whether the settler can at all become a native when she points out that human beings on earth always tend to feel alienated. The protagonist and Rahul Moghe ascribe the cause of this loneliness to the alien entity's presence inside the human beings, and its unconscious yearning for the distant home world. So, when his lady friend Binodini tells Arun that he is no more alone on earth than anybody else, she is actually articulating the hybridity and the resultant alienation of human society in a very poignant manner.

Singh, however, doesn't limit this settler/native debate within the conqueror/conquered perspective. She extends this dichotomy to the immigrant context by sending Arun to the US as an immigrant computer engineer. This sensibility is most poignant when Arun realizes everyone to be an immigrant in the streets of Boston irrespective of their skin colors: "So what if I'd come from a farther shore than anyone else? This was Boston, one of the great melting pots of the world, where nearly everyone was a stranger" (42). What is so important here is to realize that Singh is questioning the concept of belonging itself. She is questioning not only the belonging of an immigrant, like herself, to the New World but she is literalizing the metaphor of the alien and the New World to place the question of belonging in a much wider context. The concept of the melting pot, where different ingredients come together to create a single composite, is questioned not only in the monolithic American identity, but also in the backdrop of India. The actions of the alien hunters, who are primarily Indians, hint at nothing short of xenophobic anxiety. They won't stop until they have incorporated the aliens into a native identity. It is an impulse towards reverse colonization that can also

be seen in aggressive nationalism. However, like most other Anglophone Indian science fiction, Singh's work critiques such essentialism and hegemonic tendency regardless of their origin.

Distances leaves out such direct references to the historically colonized spaces. Set in a distant planet, like many of her other works, *Distances* deals with the concept of a multidimensional universe and abstract mathematics as a key to it. On the one hand *Distances* depicts and advocates assimilation of different cultures, and on the other it warns of the danger of losing one's own identity in the assimilated culture. This work, which reminds of Ursula K. Le Guin's *The Left Hand of Darkness* (1969) in its myth making prowess and its bold expression of multiple sexual modes, suggests the restructuring of social relations with every technological advance.

Distances follows the actions of Anasuya, a green skinned amphibian female alien, who has migrated to the City of rocks from her own watery world Sagara. The environmental differences between the City and Sagara heighten the effect of alienation: the City is dry, all rocks and sand, while Sagara is an ocean world ("Sagara" means "ocean" in Sanskrit); the City is the metropolis, accepting streams of immigrants, while Sagara is more inward looking, existing on the periphery; and if the City represents the world of science and technological wonder, Sagara represents the world of philosophy and organic relations. Anasuya is the bridge between these two worlds. A native of Sagara, she finds the appreciation of her abilities in the City. She is the quintessential immigrant, enhanced through the literalized metaphor of the alien—green skin and fish gills. Her existence in the city is always marked by a lack—lack of belonging; and her integration into a "House," a "pentad," the group of five lovers, is only outward. Like Arun in *OLOM*, Anasuya always exists in between. She is what Bhabha call in *The Location of Culture* "not quite," "not white."

However, the sense of hybridity is not limited to Anasuya's physio-cultural identity (green-skinned fish-girl and an immigrant from Sagara to the City) but it is also extended to the City itself. The stone curved metropolis is depicted as a profusion of multiplicity. It is the center of the alien world; but its relationship to the peripheral Sagara is not the usual binary relationship of power politics. Neither do the conqueror/conquered binaries apply to the settler/native situation in *Distances*. Anasuya is the settler in the City, but she is by no chance the conqueror. Neither is there the exact power relation of first world and third world that exists between the USA and India as presented in *OLOM*. Here Singh is trying to conduct a thought experiment to discern a new kind of relationship that is based on multiplicity of existence. In fact the origin of the City is ascribed to the coming together of different species on a migratory crossroad. Every year the City plays host to a cross-cultural gathering when the different sentient beings of the planet meet on their nomadic journeys. What is important here is to realize that *Distances*, like *OLOM*, emphasizes hybridity in its various manifestations. Such coexistence of multiplicity also enables this text to symbolically unravel the status of the postcolonial and transnational immigrant culture—an amorphous culture that excels because of its fluidity. It takes in, and at the same time it gives back.

However, Singh is not blind to the forces of centralization and monolithic social tendencies. The Tiranis (the aliens that come to Anasuya's planet for scientific collaboration) are depicted as a species completely under a centralized governing intelligence, the "Lattice," that is connected to every citizen like a net. Under such a system individual qualities and thoughts are subsumed to that of the overarching structure. Yet, when the Tiranis arrive on Anasuya's planet they start expressing individual personalities. Nevertheless it is also important to note that the centralized system of Tirana is not depicted in the novella as essentially harmful or evil. The tendency of centralization is also witnessed in some degrees in the Master of the Temple of Anhutip, who at some level seeks to control

Anasuya's course of action.¹⁰⁸ The temple itself is an institution that assumes all authorities over "mathematical arts." But, even in their centralized structure, the temple mathematicians always accommodate newer inputs and different mathematical systems. It is apparent that Singh tries to strike a balance between the tendencies of centralization and that of multiplicity in her universe. This tendency ultimately contributes to the dialectical process through which the book functions.

From different perspectives the relationship between the forces of centralization and that of multiplicity can be associated with the dialectic between purity and hybridity. The purity/hybridity dialectic can be placed, as in most of the texts under consideration in my project, in both nationalist and colonial contexts. In *OLOM*, Rahul Moghe's effort to seek out the pure settlers from their human hosts is a scenario when the colonizer's tendency toward a pure identity is revealed. Again, the alien hunters' (who are all Indians) method of eliminating all the aliens and make them identical to the humans is surely an example of an aggressive nationalism.¹⁰⁹ Although this belligerent nationalism (literally transforming the alien into the image of the self) can be attributed to any propensity to create an authoritarian system, the Indian background squarely puts it in the context of aggressive decolonization. However, Singh's preference for hybridity can be easily discerned in the multiple points of view of Arun and also in the failure of both Rahul Moghe and the alien hunters to eradicate the identity of the Other—the alien as well as the colonized humans. All the Earth dwellers to the end remain their mongrel selves. Singh is fully aware of the ideologies of domination operating in every

¹⁰⁸ The Master in many respects resembles Sabul in Ursula K. Le Guin's *The Dispossessed*, who tries to control the protagonist, Shevek, and appropriated his work on an acclaimed Anarchist world.

¹⁰⁹ It can alternatively be seen as referring to the ultimate culmination of Western rationality—full integration of the individual into the system through death. This is what Theodore Adorno called, "Genocide is the absolute integration" (*Negative Dialectics* 354). See the chapter on *Generation 14* for more discussion.

settler/native scenario, yet she puts forth a powerful statement for multiplicity through the fused self of Arun.

Distances, published a year later than *OLOM*, shows further progress in Singh's advocacy for cultural assimilation. In this text the metropolitan space acts as a domain of integration while the peripheral Sagara, which has its own form of multifarious existence, makes the statement of purity. Anasuya's mother and the elders of her race promote a secluded way of life, excluding the world away from the Ocean. Although the world of Sagara is depicted as a peaceful cohabitation of different marine life forms, including the "leviathans," the pre-historical alien beings that originated the people of Sagara, their refusal to acknowledge the existence of a world different from their own signals a kind of provincialism and purity mongering; even though that purity is only a fiction. In contrast, the mechanical life of the city is a profusion of hybridity—even the inhabitants' bodies are intruded by inorganic ornamental rock formations.¹¹⁰ The community in the City often consists of beings other than humans. The best illustration of such cohabitation and acceptance can be seen in Anasuya's pentad consisting of three City dwelling humans, one Ghoomin nomad (who was in love with a gwi, a sentient avian), and Anasuya. The pentad functions on love and acceptance of one another and nobody is strictly bound by one to one relationships. Singh is very clearly making a bold statement for multiplicity and acceptance—not only of acceptance of the Other in the context of race, but also in the sense of the sexual Other. In her depiction of sexual relations she approximates Le Guin's *The Left Hand of Darkness*, nay, she goes beyond Le Guin. Not only does she make homoerotic and multiple-partner sexual relationships normal in her world, but she also hints at bestiality and inter-species sex when she mentions Silaf's (the Ghoomin girl) relationship with the gwi and the relationship between a

¹¹⁰ People in the City implant colony of polyps into their bones, usually on the cranium and the jaws, that leads to stone like growth on their bodies. Some people even go for full body armors.

Tirani and a Temple technician. Clearly such relationships add to Singh's advocacy of liberal acceptance.

Nevertheless even in such bold statements of acceptance and individuality Singh inserts a need for a holding center. She mentions that every House functions around an intangible center—a member who holds the whole pattern together. She also presents a controlling agency in the concept of the “mathematical rider,” who holds the pattern of the unfolding multidimensional mathematical space, the “sthanas” (Sanskrit for “space”), to discern a meaning out of chaos. This subtle hint of a centralized agency, however, can be seen not as undercutting the statement of multiplicity, but as rising out of that. It is a new type of relationship that Singh is formulating—a natural choice of equilibrium rising out of free-will. Although at some aspects Singh's system seem very similar to Le Guin's exploration of anarchism in *The Dispossessed*, *Distances* does not explore all the ramifications of such a social construction.¹¹¹ The social structure of Sagara, the Other of the City, though suggests similarities with anarchism as explored by Le Guin. Although Sagara presents a communal existence, the society functions through the willing participation of all its members. Like Le Guin, Singh also presents stagnation as a result of blind following of conventions. Anasuya's journey out of Sagara represents a step away from any kind of stagnation—even if that is apparently considered as non-patriotic. This is also clearly a step away from blind nationalism that averts one from the outside world.

¹¹¹ In *The Dispossessed* Le Guin experiments with the concept of Anarchism on the world of Anarres. Le Guin points out that every system tends towards stagnation unless revived by a new revolution. In the novel Shevek, the scientist protagonist, leaves Anarres disappointed to travel to Urras, the world of Capitalists and Communists. The act though seen as unpatriotic by the Anarresti, provide the much needed revolutionary impetus to keep Anarchism alive on Anarres. *Distances* provides a similar scenario through Anasuya's leaving of Sagara. In *The Dispossessed* the invention of “ansible,” the device that can communicate instantaneously by manipulating spatio-temporal fabric, hints at the end of isolation for the Anarresti and the related fears and benefits of alien encounters. Similarly *Distances* hints at similar anxieties through the solving of the hyperspace equation that will lead to interstellar travel and contact with aliens.

This rejection does not, however, imply lack of love for one's homeland. Anasuya's yearning for Sagara clearly suggests otherwise. The book nevertheless proposes that some distances once traversed become irreducible; in spite of exploring new routes back home, it is not possible to trace the exact shape of one's roots. Anasuya's slow loss of skin color along with the disappearance her "athmis" (the special mental ability to see the world through mathematical equations) suggests such a distance from her roots. She slowly assumes the native qualities of the place where she has settled in. This outcome is however hinted at from early on in the novella through the solitary brown skinned man in Sagara, who didn't have any athmis. He is the person who ventured out of his native soil and lost his original identity. Yet Anasuya's final resolve to go back to Sagara at the end of the story and the brown skinned man's offering of himself to the leviathans, in a sense suggests that the path back home always exists, but the person going back home is never the same.

This issue of going back home brings us back to the question we started out with—can the settler ever become a native? Although the answer is contingent upon the exact power relation of the native/settler situation, Singh seems to suggest that a piece of the alien always exists in the settler, even when he or she is unaware of its existence. Sometimes it is overt, as in Rahul Moghe, Arun and Anasuya, and sometimes it is hidden underneath the native identity, as in the human Earth dwellers in *OLOM* already colonized by the aliens from Saptarishi (Sanskrit for Ursa Major, the constellation where Arun's home world is located). The trope of the settler transforming into a native, or attempting to do so, is a widespread one in postcolonial discourse. Not only has this trope been theorized by critics such as Mamdani and Ahluwalia, it plays a big role in postcolonial literature in general, science fiction or otherwise. In such stories as Andrea Hairston's "Griots of the Galaxy," Karin Lowache's "The Forgotten Ones," Greg van Eekhout's "Native Aliens," Celu Amberstone's "Refugees" and Ven Begamudre's "Out of Sync" as well as in Vandana Singh's other stories this dual identity is explored

from various perspectives. In most cases a constant anxiety of alienation persist in all settler/native scenarios.

However, these scenarios are different from such mainstream Western science fictions as those that explore alien invasions and express xenophobia. Such works as Robert Heinlein's *The Puppet Masters* (1951), Jack Finney's *The Body Snatchers* (1954) and the subsequent films, Theodore Sturgeon's "Tandy's Story" (1961) and movies like *Independence Day* (1996) take up similar issues of alien parasites. But they clearly exude Western xenophobia and anxiety of the Other—the different.¹¹² The postcolonial works present just the opposite point of view—the perspective of the Other.¹¹³ Singh's works seek to strike a balance between these two perspectives. In Singh's scheme of things the settler/native dialectic leads to formation of newer identities—these identities are not exactly "postcolonial mimics" described by Bhabha in *The Location of Culture*, because in this scenario there is nothing essentially to mimic. It is rather a coexistence of differences within a composite identity—an identity that must accept the stigma of the alien, even in its native land.

As is apparent, the two novellas under consideration represent the postnational stage in Anglophone Indian science fiction. These works reflect the sensibility of the expatriate diasporic

¹¹² Such xenophobia is a reaction of the Cold War and the fear of the Russians in the West. However, these can easily be seen as fear of all the Others that the West cannot understand. John Rieder connects this type of xenophobia to the impulse of colonial domination. He mentions that the writers of 1920s and '30s American and British science fictions imagined "extraterrestrial invaders who try to wipe out humanity, human colonizers of other worlds who try to eliminate resistant natives, underground civilizations who want to take over the surface and exterminate the present inhabitants in the process, feminists from the fourth dimension who want to destroy all males, genocidal race wars and class wars and war of extermination between Pedestrians and Automobilists" (142). Rieder explains that genocidal tendencies in these works can be seen as reflections of those tendencies in real life colonial politics. Patricia Kerslake comments in this context that "the unknown Other constitutes the perfect adversarial foil" (18). She explains "the other is either adored or despised but rarely accepted on the middle ground; the contemporary Eurocentrism of the technologically advanced northern hemisphere has [. . .] been extrapolated into SF" (18).

¹¹³ Kerslake says in this context, "Angelika Bammer calls for an end to such extremes, with the comment that 'between xenophobia and xenophilia there is no place to rest: both constitute the place of fear and denial from which we must, for all our sakes, move on'" (18). Postcolonial science fiction tries to create this middle ground, where the erstwhile Other becomes the self in questioning the West's identity politics.

author. Although diasporas are often very nationalistic despite their advocacy of transnational sensibility, Singh's works show a tendency of going beyond such nationalistic discourses. However, these books also retain the second important dialectic of Indian science fiction—that between the Indian and the Western cultural influences. The interaction of these two forces in *OLOM* is plainly visible, on both superficial and subtler levels. Although the protagonist is an alien, he is given an Indian identity; in fact all the major characters in the novel are/appear as Indians. India and the USA are the two spaces where the actions take place. Yet, these are only the superficial manifestations of the dialectical forces at work. Much more subtle is the aspect where the aliens are shown as being integrated into the human society—invaders slowly losing their power and identity to the great cultural flow of India. This all devouring characteristic of the human society can reasonably be interpreted as a metaphorical representation of the Indian tradition, which has been absorbing foreign invaders into its great cultural stream to create a huge multidimensional tradition.¹¹⁴ Although annihilation of the aliens—the Others—can be interpreted as representation of Western xenophobia and Imperialist repression of the Other, the strange power equation hints otherwise; after all the aliens arrived on earth as settlers or colonizers, not as immigrants to the metropolitan center.

In the posthuman universe of *Distances* the dialectic between the Indian and Western traditions are less obvious. The primary interaction of these two can be witnessed in the interaction of the organic and spiritual realm of Sagara and the materialistic and mechanized sphere of the City. While the Sagarans see knowledge as a product of philosophy and spiritualism, something to be pursued for the achievement the seeker's true spiritual potential (the proper blooming of the "athmis"), the City people see it as methodical science, a process of systematic codification and storage. While the Sagarans have

¹¹⁴ Vandana Singh takes up this same theme, but more explicitly, in "Delhi," where she shows, through her protagonist's ability to see through the spatio-temporal continuum, various foreign powers ruling India and eventually being swept up by the great flow of history—to lose their individual identities.

an innate capability of intuitively grasping the inner truth of the world, the City people require methods and tools to reach such understanding. In a sense, the Sagarans are capable of seeing through to the noumena, while the City dwellers must work through the phenomena.¹¹⁵ Knowledge for the Sagarans is to be achieved for its own sake, independent of its practical application; but, the City seeks knowledge for application—for furthering technological ends. However, this dialectic is taken to a further extent by contrasting Anasuya’s planet as a whole to the planet Tirana. Here the contrast can be seen as a quantitative jump, not a qualitative change. The City is only outwardly mechanical, with men grafting polyps in their bodies to create semi-cyborg physical entities; Tirana however, has established a “cyberocracy,” where a cybernetic system controls and administers all the individual intelligences. The physical existence itself has become subsumed to a kind of cybernetic existence. This surely hints at the postindustrial Western world and its dependence on information technology.

The novella however does not stop at this mechanistic level. *Distances* is wholly dependent on the interaction of the Western and Indian traditions to bring forth its message of multiplicity. It primarily depends on Hindu philosophical concepts to drive the plot forward. The word “athmis,” which signifies a special mental/spiritual gift that transcends the daily existence and understands the inner workings of space, time and nature, is an obvious play on the Sanskrit word “atman.” Atman signifies the immortal soul in Hindu tradition that is, according to the Advaita Vedantic school of thought, one with Brahman, the universal soul. Although different views exist regarding the exact concept of atman in various traditions of Hindu and Buddhist philosophy, it is very clearly that unique

¹¹⁵ The concepts here are very similar to Immanuel Kant’s use of “noumenon” (“Ding an sich” or “thing-in-itself”) and “phenomenon” (“Erscheinung”) in *Critique of Pure Reason* (1781) in the fact that Sagarans’ “athmis” structure their understanding of the phenomenon beyond the perception of their senses (in case of Anasuya, mathematical harmony). However, the concepts of “Brahman,” the fundamental reality underlying all objects and experiences, and “Maya,” the creative power of “Brahman” which allows it to appear in manifold object appearances, in Advaita Vedanta philosophical tradition also correspond with the situation in *Distances*.

attribute of a person that enables him or her to see beyond the sensory world into the transcendental realm. From this perspective Anasuya's loss of *athmis*, the ability to see beyond the sensory realm into the mathematical harmony of the universe, is far more significant than the loss of her epidermal tint.¹¹⁶ This may signify the great sacrifice that is required to reach beyond human ken and chain the secrets of nature—the formulation of the hyperspace in this case. Again, Anasuya's collaboration with the Temple technicians suggests a need for combining the intuitive genius with the technological brilliance to bring out the ultimate secret of the universe. This point of view is reinforced when the Tiranis arrive with their high-tech mathematical equation seed seeking help to solve it. The arrival of the Tiranis, who are technologically superior to the Temple scientists, also suggest that technology is not the replacement for intuitive genius. To put it slightly differently, technology cannot achieve the inner truths of the universe without the philosophical vision. The spiritual/philosophical and organic aspect of the book can easily be associated with the Indian traditions, while the methodical and more technology oriented side with the West.

Furthermore, some of the originating myths of the novella and the fundamental system of mathematical thinking show the definite presence of the dialectic of Indian and Western traditions. This is especially true of the myth of *Ekatip*, *Shunyatip* and *Anhutip*. *Ekatip* and *Shunyatip* (*Eka*= one, *Shunya*= zero in Sanskrit) or the twin gods, as they are called by the City dwellers, symbolize the binary process of thinking, both in mathematical and philosophical terms. The myth of origin of numbers tells that the twin gods were deceived by the shape changing god *Anhutip* and were left gazing in opposite directions in time while he stole their knowledge of the numbers. Thus, though existing at the same space, *Ekatip* and *Shunyatip* always remain elusive to each other:

¹¹⁶ Anasuya was the wife of Rishi Atri daughter of Daksha in Hindu mythology and was known for her piousness. The name literally means free from envy and jealousy.

In all the eons that have passed they have forgotten about the cube and seek only each other. Each hopes that the other will jump ahead or backward in time to meet him. Each wonders whether they should keep walking in time in opposite directions so that they will meet at last. They do not realize that all they have to do to break the spell is turn around and see each other. (77)

The myth of the origin of numbers unambiguously rejects the dualisms that lead to irreconcilable binaries—a system often ascribed to the Western rationalism and its resulting imperial thinking. The role of Anhutip as the shape-shifting opportunist, who brings the gift of mathematics to the sentient beings, signals the need for flexibility in all ideologies.¹¹⁷

The myth of the Nameless Goddess is another influence of Hindu philosophical tradition. The Nameless Goddess represents the elemental force that gives rise to all material existences on Anasuya's world. This concept is very close to the Rigvedic "prakriti," the primal motive force of nature, often imagined as feminine. The myth that the Nameless Goddess created all the beings and the planet itself only reinforces this. The orgy with the twin gods and Anhutip from which the knowledge of mathematics, which is the key to understanding the universe, slipped into the world of man, in a manner reflects the coming together of Purusha, the cosmic consciousness, and Prakriti that creates the universal harmony and also the means of understanding this harmony.

Although in certain aspects this dualism may seem similar to the mind/body dualism of the Western tradition, in the Hindu traditions such dualism does not necessarily require the submission of one term to the other. Singh's work also does not assume any such unequal dualism. Rather *Distances* places more emphasis on the coming together of opposites to create something new. The text relies on a method akin to the Hegelian dialectics where the thesis and the antithesis are reconciled through the process of synthesis. This tendency is visible in Anasuya's explorations of mathematical "sthanas"

¹¹⁷ It is however ironic that binary mathematics (just as the decimal system) originated in ancient Indian mathematical thinking, not in the West. May be Singh is trying to hint that such dualistic thinking exists within the Indian traditions as well.

inside the “amion” (a kind of vat with micro mechanical components that allow Anasuya’s mind to be used as a supercomputer and record the outcomes in a chemical formula). Although Anasuya’s athmis can be interpreted as some kind of spiritual power, her flight through the coalesced space-time is probably an exposition of the string theory, which conceives the universe as a multidimensional whole. The most important influence of the Western traditions though is in the construction of what Scott Bukatman calls the “paraspace”—the hyperspace as well as the cyberspace. The mathematical realm that Anasuya navigates is a kind of cyberspace—a realm that does not have any physical reality but exists in information flow through her neural circuits. This is a realm that is actually indescribable in sensory terms—the Other to the world of material existence. However, Bukatman also points out that in science fiction “the paraspace is not simply a separate sphere, but a site where the conflicts of the normal world are resolved” (161). Anasuya’s conflicting emotions of losing her own identity (through the loss of her skin color and her athmis) and longing for her roots are resolved through the appearance of Vara, who is the future of Anasuya in the paraspace of the amion. She is finally reconciled to her new brown bodied athmis-less identity when she sees Vara in her own reflection in the real world. The paraspace—as hyperspace—also resolves the distances of the real space. It promises a future when space or time will not stand between love and understanding.

What is important here is to realize that Singh is not putting forth a litany for Hindu philosophy but is offering a space, not very different from the novella’s paraspace, for a dialectical cultural reading. This reading will enable both the Indian and the Western readers to realize the need for understanding and collaboration in a postimperialist and postnationalist world. In *OLOM* too a similar message of understanding and collaboration is delivered, especially through Arun’s ability to understand other humans completely and in the uneasy alliance between Arun and his colleague Binodini at the end of the novel. In both these texts the metaphors of immigration and colonization

serve to whet up the critical process of thinking that goes beyond settler/native or colonizer/colonized issues. Both the texts emphasize the acceptance of the Other. In *OLOM* this acceptance takes place mostly through Arun's peculiar abilities, but also through dialogue between Binodini and Arun. Arun's ability to empathize perfectly with men, women and animal without any distinction and also his complete disregard of physical attributes suggests that it is ultimately the mind which contains the human essence. Similar sentiment is expressed in *Distances* through the emphasis on mental processes, but also through the perfect harmony of Anasuya's pentad consisting members of heterogeneous origin.

Yet, *Distances* and *OLOM* both accept that the moment of contact between two groups of aliens is always replete with a specter of violence. Such violence occurs in the transformation of the aliens in *OLOM* and Rahul Moghe's killing of the humans. *Distances* however uses a subtler approach in dealing with this issue. The contact between the Tiranis and the Temple scientists is marked with mistrust and tension from the very beginning. Although there are efforts on both sides towards a more meaningful collaboration, the activities often descend into chaos. This tension, though, is mitigated by the friendship between Anasuya and Nirx (the Tirani mathematician) and also by the love between the Tirani scientist Hiroq and the Temple mathematician Turel. The most sinister aspect of the contact with a technologically advanced civilization is however hinted at through Kzoric's (a Tirani scientist and exile) comment, "Wait till the hyperspatial cruisers come, little green girl! Then your people will come into their glory. They'll be sung all over the galaxy! There will be a little green fish in every pool!" (136). This comment well suggests the colonialist mentality on the part of the technologically advanced Tiranis—the "green fish" becomes a commodity to be exported all over the universe.¹¹⁸ Yet

¹¹⁸ The association with Caliban in Shakespeare's *The Tempest* is explicit. Caliban is described as half fish half man by some of the non-islanders, who also plan to ship him back to their homeland as an exotic exhibit.

Anasuya's resolve to prepare the people of Sagara for such a future plainly suggests that Singh sees such transformations in social relationships as inevitable with every technological breakthrough of great magnitude; the book also suggests that such breakthroughs are essential for the evolution of every civilization.

Distances, however, steps beyond the context of postcolonial power relations to seek an ultimate synthesis of the two basic forces that drive science fiction: rational process of thinking, and aesthetics that function intuitively. Singh unites abstract mathematics and inspired process of creating art to suggest that ultimate harmony can only be reached through a union of rational thinking and intuitive understanding. Anasuya can solve the equation of hyperspatial mathematics only when she can create an inspired piece of art. All her life force is channeled into these two projects to bring forth two of her masterpieces—the equation of hyperspace and her best work of dynamic art. This synthesis of art and mathematics, two apparently opposite domains, not only reinforces the book's message of synthesis, but also indicates that science fiction can work as the perfect device for bringing together of such opposite forces.

Both the novellas thus position themselves at the center of the double dialectics of Anglophone Indian science fiction in spite of being mostly postnationalist in their orientations. The awareness of the issues existing on both sides of the colonial divide allows these texts to engage into a dialectical process to bring out a synthesized point of view. While the interaction of the forces of orthodox purism and liberal acceptance of hybridity, apparent directly on surface, gives the basic driving force of the works, the dialectic between the Indian and the Western traditions provides a subtler subtext, thus endowing the texts with a unique Indian characteristic. Alienation and the immigrant split personality that thematically dominate the two works are resolved into a more syncretic vision of Singh, which

never tries to cancel out the root of the outsider yet advocates integration into the new composite cultural stream.

CHAPTER III

AUTHORING SOMEONE ELSE'S FUTURE: DEPICTIONS OF INDIA IN ANGLO-AMERICAN SCIENCE FICTION

Science fiction as a genre emerged even as modern Western empires expanded their domains; and just like the modern western empires, Western science fiction projected the monocultural assumptions of the West onto other places and other times. Gwyneth Jones aptly says, “Science fiction is in the export business. [. . .] The primary objective becomes more clear—a sending outwards, a projection of “our own” technophilia, our own social and political ideation, into other realms and other times. The search for new worlds is secondary” (2). Even when primary objective of the texts is exploring other cultures and other places, the devices used are estrangements from all things Western, and intentions are subverting Western norms, the end result is an imposition of Western standards in direct or indirect manner. This is especially true for Anglo-American science fiction, the tradition flourishing in two of the largest imperial civilizations of the last two centuries—Britain and America. Anglo-American science fiction is generally more comfortable populating its fictional worlds with imaginary aliens and imaginary cultures than real people and real cultures outside the West. However, the discourse of Otherness is very prominent in many of these works, and often these imaginary worlds correspond very closely with real world scenarios of colonial/imperial domination. Things become much more complicated when these texts venture into the real-world non-Western societies. With rare exceptions, these efforts end up engaging in Saidian “Orientalisms” and enforcing Western perceptions, even if their expressed intention is not to do so.

Representations of India and Indian culture in Anglo-American science fiction are no different. This chapter examines such representations of India in Anglo-American science fiction to delineate the Western discourses on Indian future, and, thus, show what the indigenous science fiction authors are

competing with. Still, it would be wrong to suggest that depictions of India have remained static. To tell the truth, other than Roger Zelazny's *Lord of Light* (1967), a tangential reference to Hindu myths in Gwyneth Jones' *Divine Endurance* (1984) and occasional Indian scientists in Arthur C. Clarke's works, India has not featured much in Anglo-American science fiction till the end of the twentieth century. It can be argued that the same reasons that kept India from producing science fiction in the English language during this period deterred the West from writing science fiction about India. For most part of the twentieth century India remained to the West a domain of the eternal, a civilization of the past where nothing changes and thus nothing is new.¹¹⁹ Hence, a good place for historical romances and fantasies. But, with the rise of India as an industrialized nation spearheaded by its burgeoning IT industry and nuclear arsenal, attention has started slowly shifting towards its future. Yet, India remains a strange cohabitation of myth and IT, God and computer, and the scientific and the fantastic. Thus, the Indian future finds curious resonances in Western science fiction—from exotic fascination to careful political consideration, and from religious Orientalism to social incomprehension. Whatever it may be, India overwhelms the Western writer, resists projection of Western values on its society and, thus, keeps the Western narratives from grasping the country's chaotic reality. It would, however, be unfair to say that no Anglo-American science fiction can scratch the surface of the Indian reality. But, even when the author understands the Indian milieu, his or her perspective remains an outsider's view, always looking in, never blending within. However, British and North American experiences with India have not been similar to each other; and this experiential difference probably explains the divergence of approach between the British and the North American texts.

¹¹⁹ Speaking in the context of Indian art history in "Reclaiming the Past and Early Modern Indian Art" (*Third Text* 18.3 (2004): 213-28), Daniel Herwitz expresses this type of Orientalism very eloquently:

India could hardly be conceptualised by such persons [Westerners] as a place where ruins ring of transience, for nothing in India was in the end ever ruined. India was rather an exotic flower whose every petal, every building and every place was timelessly existent as a piece of the past replayed forever, as a living monument. No need for nostalgia here, for the painter, traveler or poet had arrived at a world where nothing dies, where everything stays the same because nothing is ever new. (220)

The British encounter with India not only dates back to centuries, but it is also entrenched in geographical and material conquest—the colonial master/slave relationship. Most of the British writings about India that started roughly around the fifteenth century are exercises in interpreting the new and the unknown space—a method of negotiating the Other, to measure and to categorize it. Like most of the early colonial writings early British writing is also cartographic in nature and often consists of sensationalism and high exoticism—a tool that highlights the strangeness of the Other to the readers at home, and thus underpins Britain’s self-image.¹²⁰ With time and England’s consolidation of power in the region, the pieces become exercises in imposing the ideologies of domination on both sides of the power divide.¹²¹ Although the classic colonial narratives of the eighteenth and nineteenth centuries were accompanied by narratives of exoticism, and the political discourses of the twentieth century were supplemented by the postcolonial nostalgia for empire in the writings after 1947, these texts emerged out of a direct contact, nay collision, with the Indian landscape.

The North American encounter, however, is more recent and more indirect. North Americans know India more through the large number of immigrants and non-immigrant workers to the USA and Canada than through their direct historical experiences *in* India. Although the Americans or any Westerner in India to some degree exploited their proximity to the British colonizers, the USA and

¹²⁰ Pramod K. Nayar in *English Writing and India, 1600-1920: Colonizing Aesthetics* (2008) and Edward Said in *Orientalism* and *Culture and Imperialism* explain that England and Europe defined their identity by positing non-European spaces such as India and Asia (or Africa) as the Other, everything that is not European, through the deployment of colonial aesthetics. Nayar says, “Early modern travel literature has been variously seen as attempts to define England (and Europe’s) sense of nationhood, the problems of the body politic and the identity of an emergent bourgeois [. . .]” (2).

¹²¹ Nayar studies both fictional and non-fictional English discourse on India in *English Writing and India, 1600-1920* and asserts that five modes of aesthetics informed this discourse during the period under consideration: the marvelous, the monstrous, the sublime, the picturesque and the luxuriant. According to him the early writings depict India as a land of plenty, of novelty and of difficulty, a land vast in expanse as well as varied in culture and inhabitants, but ultimately a land to be conquered by the English. The aesthetics of the monstrous on the other hand radically differentiates the natives from the Europeans by rendering them frightening or by reducing them to the ludic. Nayar explains, “The monstrous was a part of the project to dehumanize Indian space, to locate Indian culture as radically different and flawed. With these two proto-colonial aesthetic modes the English mapped India as different, inhuman, chaotic, varied and dark” (5).

Canada did not have similar relationships with India as Britain did: India does not appear as the strange Other against whom they have to define their selves, but one Other amongst many. The role of the threatening Other in the American narrative has been historically bestowed upon the “Red Indians,” the Soviets since the start of the Cold War, and is still assigned to Russia and Communist China, and more recently to the Islamic Middle East. In addition, despite of the US government’s meddling with the politics of the Indian subcontinent, the general cultural discourse on India in North America has mostly been limited to its spiritual and religious dimensions. India for the Americans, as for most of the “West,” acts as a recess of spirituality, a medium of self-discovery and, often, as a receptacle of hidden sexual power. With the neo-imperial prerogatives and the business logics of outsourcing and cheap production costs, recent North American writing on India has only changed its attitude superficially. Behind the veneer of economic partnership, the relationship has remained that of exploitation of the exotic land where everything is possible and everything is allowed.¹²²

This chapter studies five works, three British—*River of Gods* (2004) and *Cyberabad Days* (2009) by Ian McDonald and *Dragon Fire* (2000) by Humphrey Hawksley—and two North American—Roger Zelazny’s *Lord of Light* (1967) and Jan Lars Jensen’s *Shiva 3000* (1999).¹²³ While the British texts deal with the country as a concrete geographical region with internal and external socio-political markers, the North American works transfer India to a pseudo-mythical dimension—either by constructing a Hindu society on another planet representing a stage in Indian history, or by

¹²² In his dissertation “Strangers in the Postcolonial World” Thomas Halloran delves deep into American writing on postcolonial Africa and India. He suggests that although US writing resides outside of the colonial dichotomies seen in British or French texts, most American texts ultimately establish similar exotic and exploitative discourses about India. In *India in Canadian Literature* (1999) Jitesh Parikh makes similar claims for Canadian literature about India. He however adds in recent postmodernist works Canadian writing has started expressing a more balanced view of India.

¹²³ India also appears as a setting in a few other recent American science fictions such as Allan Dean Foster’s *Sagramanda* (2008) and Bruce Sterling’s “Sacred Cow” collected in *A Good Old-Fashioned Future* (1999). These works also show a movement away from explicit Orientalism to subtler imposition of Western outlooks.

creating a far future society hanging in a geopolitical limbo (as good as transporting it to another planet or to an alternative world). This difference occurs due to the very different backgrounds that inform the British and the North American cultural discourse on India. Although I do not assume a reactionary or nativist position by claiming that only Indians should write about the Indian future, I argue that Western narratives about future India are still entrenched in Orientalism.

In “Shades of Orientalism” Peter Heehs argues against Edward Said’s lumping together of all the different strands of Orientalism under a negative banner. He discerns six different attitudes in the scholars of oriental cultures, especially among Indologists, and indicates that not all of these were negative; in fact some were adopted by the Indians themselves for nationalist purposes.¹²⁴ The stances that we see in these Anglo-American science fiction texts (especially in Jensen and Zelazny and excluding Hawksley) regarding India are a mixture of these different positions: colonial “Romantic Orientalism” and postcolonial “Reductive Orientalism.” According to Heehs “Romantic Orientalism” has a positive connotation, which he associates mostly with nineteenth century German scholarship on Indian history and philosophy. This position, he claims, does not have colonial ramifications, as Germany did not have any political or economic stake in India. However, Romantic Orientalism is also marked by a tendency to exoticize India as an antiquarian culture that has lost touch with the modern world. Reductive Orientalism, in contrast, has mostly negative connotations and, as Heehs says, corresponds to Said’s concept of Orientalism. This form of discourse sees all the cultural and religious

¹²⁴ Heehs claims in abstract to the article:

In *Orientalism*, Edward Said attempts to show that all European discourse about the Orient is the same, and all European scholars of the Orient in the aims of European imperialism. There may be “manifest” differences in discourse, but the underlying “latent” orientalism is “more or less constant.” This does not do justice to the marked differences in approach, attitude, presentation, and conclusions found in the works of various orientalists. I distinguish six different styles of colonial and postcolonial discourse about India (heuristic categories, not essential types), and note the existence of numerous precolonial discourses. I then examine the multiple ways exponents of these styles interact with one another [. . .]. (169)

concepts of India as a construct of Western discourse, and, thus, takes away the agency from the natives.¹²⁵ Our detailed exploration of individual texts will not only unravel the types of Orientalist attitude embedded in these works, but will also reflect on what such Orientalist tendency means in terms of genre, politics and aesthetics, especially when present in such a subversive literary genre as science fiction.

Reworking of Hinduism in *Lord of Light*

Roger Zelazny's use of Hindu and Buddhist religions and myths in the context of an alien planet's colonization in the far future in his Hugo award winning novel *Lord of Light* is probably the first substantial mention of India in Anglo-American science fiction. However, in the strictest sense, this novel does not deal with India as a geographical region. Zelazny rather uses the religious and mythical elements from Indian culture to construct a Hindu dominated society on a distant planet; he uses names for people and places that constantly refer back to ancient India. This is in a sense ideological reconstruction of ancient and timeless India through science fictional devices of spatio-temporal estrangement. Zelazny uses this re-enactment of Hindu pantheon as a form of social control of the subject people, where the renegade messiah figure of Sam introduces Buddhism as a means of subverting that control. However, for the purposes of this book, Hinduism can very well be substituted by any form of institutional religion that seeks to control the masses through incomprehensible and

¹²⁵ Heehs classifies colonial and postcolonial Orientalisms under six categories. Under colonial Orientalism he puts "Patronizing/Patronized Orientalism," "Romantic Orientalism" and "Nationalist Orientalism," and under postcolonial Orientalism, "Critical Orientalism," "Reductive Orientalism" and "Reactionary Orientalism." The first attitude is associated with British colonizers and their understanding of Hindu culture, where the relationship between the patronizing and patronized cultures is clearly marked by political power relations. "Romantic Orientalism," Heehs argues, is free of such direct power equation. "Nationalist Orientalism" presents ancient Oriental knowledge as essentially superior to Western knowledge and, thus, as a path of national salvation. In the postcolonial category, "Critical Orientalism" frames the study of Indian history within Western theoretical apparatus, thus, falling into Western ideological traps. "Reductive Orientalism" is, according to Heehs, the Saidian mode. By speaking for the Orient, this type of discourse actually takes away the agency from the Orient. Heehs argues that Said's own discourse fits into this category. Lastly, "Reactionary Orientalism" describes the stance of many present day Hindu Nationalists—restoring India to its ancient glory by correcting the historical distortions inflicted by the Muslim and European invaders over the last one thousand years.

superhuman power. Similarly, Buddhism can be replaced by any other form of “Protestantism.” Yet, these Oriental mytho-religious elements give the novel its exotic and fantastic flavor that probably would have been lacking if any Western myths were used. Thus, the myths work in this novel as devices of estrangement and exoticism. Furthermore, the name of the spaceship, “Star of India,” which brought the settlers to this planet, suggests Indian and Hindu origin for most of its passengers; hence, Hinduism is established as the official religion and the planet becomes a reconstruction of India. Thus, Zelazny’s consequent treatment of religion and mysticism in the history of this recreated India, or more appropriately, the creation of this India in order to explore the issues of spiritualism and power, indicates the American obsession with Indian spiritualism. Even in its rebuilt form, which is removed spatially and temporally from its historic and geographic realities, India remains the eternally mythical space.

The primary action of the novel follows the exploits of Sam, who goes by many names including Mahasamatman, Buddha and Kalkin. The action takes place on a planet colonized by humans, who through physical and mental mutation has achieved power over matter and energy almost akin to gods. They have also achieved immortality through a technique of transmigration from one body to another. These pioneers, who pose as Hindu gods, however, do not share their science and technology with their descendants that live as common mortals. Their position as living gods acts as an ideological control mechanism from which they keep the population in line. Sam, who was one of the gods, though decides to end the deprivation of the people from the fruits of technology and takes up a Promethean struggle against his fellow gods. One of his major strategies becomes Buddhism, which originated out of Hinduism in ancient India. His preaching earns him position of the Buddha and slowly loosens the control of Hindu gods; and by doing this he literally reenacts the religious reformation in the wake of Gautama Buddha’s teaching in 500 BC India.

The scheme of the novel is not at all surprising for someone attempting a postcolonial reading. *Lord of Light* exhibits all the stereotypical Western interpretation of Hinduism and Indian culture.¹²⁶ The theocracy of the human gods is mostly shown as corrupted by self interest and totalitarian control over the lives of common man. Caste based discrimination appears as another way of perpetuating social segregation that aids the rule of the gods, where the priestly class is in league with the divine powers. Various mind scanning devices used by the gods as well as the Lords of Karma enforce the karmic cycle of rebirth—the devout will be reincarnated in a higher caste, while the heretics will be demoted in the caste rankings. Buddhism’s appearance as the tool of resistance against this divine despotism also reconfirms the West’s love affair with this pacifist religion. Yet, unlike texts such as *Shiva 3000*, this book does not descend straightforward into sensational exoticism. While Zelazny may not have been exactly aware of the Indian present, he seems to know about the ancient Indian history. So, even though he embarks on re-imposition of the past on the future, the total spatio-temporal disjunction—from India of the past to a far away planet in the future—mitigates his Orientalist attitude to some degree. The defamiliarization is so absolute that the subtle exoticism does not stand out.

In *Lord of Light* Zelazny not only adapts mythological elements into his story, he also adopts a mythological framework in narrating the tale. The story revolves around the figure of Sam; but, the book does not progress chronologically. The story goes backward and forward in time, each section containing an almost self-contained tale. Yet, characters and themes recur in every section reinforcing Sam’s rebellion against the gods in different manners. This mythical element is at its best in presentation of the various incarnations of Sam. In the course of the novel Sam is twice killed and twice brought back to life—reborn. In his various incarnations he takes on various identities—Kalkin,

¹²⁶ The book is also apparently influenced by Hermann Hesse’s novel *Siddhartha* (1922) that deals with Buddhism in ancient India. The use of this Hindu/Buddhist conflict can be compared to Sarukkai Chabria’s use of the same historical materials for contrasting the differences between the Western discourse and the postcolonial one.

Siddhartha, Maitreya, Lord of Light, Manjushri of the Sword, Binder of Demons, Mahasamatman, the Buddha, the Enlightened One, Tathagata etc. Nevertheless, underneath all these names he remains Sam. This narrative structure serves several purposes simultaneously. It signifies the mythical nature of the story through the system of rebirth associated to both Hindu and Buddhist concepts of birth cycles. At one level, this system of rebirth plays on the avatars of Vishnu, who come to the human sphere to defeat evil (the references to Kalki and the Buddha, two of the ten avatars, suggest this); at another level this system refers to the *Jataka* tales that recount the Buddha's previous existences.¹²⁷

The narrative also takes on an epic structure through its long philosophical and moral dialogues that are interspersed with action oriented sections. This is a typical characteristic of Indian epics and mythological texts epitomized in the dialogue between Lord Krishna and the warrior prince Arjuna in the *Mahabharata*.¹²⁸ Similar moral tracts are also embedded within the Buddhist tradition of *Jataka* and the *Tripitaka*. Zelazny creates this effect through Sam's sermons and dialogues. Just after the death god Yama kills Mara, the god of illusion, the "Great-Souled Sam" delivers his sermon on reality and illusion:

"Names are not important," he said. "To speak is to name names, but to speak is not important. A thing happens once that has never happened before. Seeing it, a man looks upon reality. He cannot tell others what he has seen. Others wish to know [. . .]. So he tries to tell them. Perhaps he has seen the very first fire in the world. He tells them. "It is red, like a poppy, but through it dance other colors. It has no form, like water, flowing everywhere. It is warm, like the sun of summer, only warmer. [. . .] Therefore, the hearers must think reality is like poppy, like water, like sun [. . .]. They think it is like to anything that they are told it is like by the man who has known it. [. . .] No word matters. But man forgets reality and remembers words." (34)

And thus Sam goes on for four full pages. Similar philosophical introspections, strewn throughout the narrative, provide the book a structure similar to the Indian epic/mythic tradition. This mythic effect is

¹²⁷ For a detailed discussion of the *Jataka* see Chapter II analysis of *Generation 14*.

¹²⁸ The episode is better known as the *Bhagvad Gita*.

reinforced by the references to original Indian texts at the beginning of every chapter. By alluding back to Buddhist and Hindu religious and philosophical texts such as *Dhammapada*, *Samyutta-nikaya*, *Chhandogya Upanishad* and *Brihadaranyaka Upanishad* Zelazny constantly places his text in a mythological context. Furthermore, *Lord of Light* itself achieves a mythical framework if we consider it through Claude Levi-Strauss's Structural method of studying myths.¹²⁹

Levi-Strauss claims that “myth *is* language: to be known, myth has to be told; it is a part of human speech. [. . .] [W]hat gives the myth an operational value is that the specific pattern described is timeless; it explains the present and the past as well as the future” (861). The narrative voice in *Lord of Light* approaches the style of oral literature not only through the references to the oral texts at the beginning of every chapter, but also in its tone of storytelling, through frequent allusion to elements of uncertainty of the information, to the “heard” information, and oral transmission: “It is *said* that fifty-three years after his liberation he returned from the Golden Cloud [. . .]” (1), “*One time* a minor raja from a minor principality came [. . .]” (42), “It is *told* how the Lord of Light descended into the Well of the Demons [. . .]” (126) and so on and so forth.¹³⁰ This type of repeated reference to orality and uncertainty emphasizes that this myth is known because it is told among the population of the planet. But, orality is also invoked in Sam's own dissemination of Buddhism. Through his sermons and teachings, Sam scatters the seeds of his protestant religion—this is also a process of being told of

¹²⁹ In “The Structural Study of Myth” Levi-Strauss claims that there are underlying similarities between myths from widely different cultures. He insists that the structures of all the myths are similar, although their contents may differ. By claiming it to be a special kind of language Levi-Strauss puts myth in the Saussurean scheme of things. Myths, according to him, have “*langue*” or the synchronic structure, and “*parole*” or the diachronic specific details within the structure. Levi-Strauss adds the elements of “reversible time” and “non-reversible time” to Saussure's structure of language, where the first component is applicable to *langue* as it is an essentially timeless structure and the second component is applicable to *parole* as it is a temporally specific element, which, once uttered, cannot be unuttered. According to Levi-Strauss all these linguistic components are applicable to myth analysis. A myth's story is always set in an ahistorical and timeless context, while every myth originates in a historically and geographically specific location.

¹³⁰ Italics mine.

possibilities to be aware of them. At a certain point the myth or knowledge of this alternative way of life becomes so widespread that the Hindu gods had to accommodate the Buddha within their own pantheon.

What is more important for our purposes, is that the atmosphere of timelessness that is created through such mythological devices. As has already been mentioned, the book works through a series of non-chronological narratives having certain common characters and thematic patterns. This common thematic pattern ultimately drives home the feeling of timelessness. Sam arrives over and over again in the narrative to promote his vendetta against Heaven. The indigenous Rakasha are tamed, released and tamed again. Only after a number of repetitions the Promethean gift of technology comes to the common people. The end of the novel further enhances this feeling of timelessness by deliberately remaining vague as to Sam and Yama's fortune after the truce between Heaven and its dissenters. The book rather proffers further possibilities of new and unsubstantiated myths about these characters.¹³¹

The references to the ancient Indian texts also create a different type of spatio-temporal continuity, despite a vast science fictional estrangement. At one level, these references connect ancient Indian history and mythology to the history and mythology of this new "India" by replaying similar archetypal themes: cultural oppression and religious/ philosophical protestantism. Thus, this estranged space and time becomes a return to the old India—the India of past. These connections simultaneously explain the past, present and the future of this off world community. At another level, the novel ascribes this timeless mythical quality to Indian culture itself by choosing to project the ancient mythical narratives on to a far future community. In a sense, this is rejecting the possibility of an Indian future which looks any different from its past. It is also evident that Zelazny does this

¹³¹ The mythical aspect of the book is also enhanced by the presence of the Jungian archetypal characters such as the "trick star" (Sam/Yama), the "wise old man" (Yama/Kubera), death (Yama) etc. within the narrative.

deliberately. Sam says to Taraka, the lord of the Rakasha, the indigenous beings of the planet, “I could just as easily have chosen another way—say, Nirriti’s religion—only crucifixion hurts. I might have chosen one called Islam, only I know too well how it mixes with Hinduism. My choice was based upon calculation, not inspiration, and I am nothing” (275). Although this calculation, for Sam, is derived from the compatibility of Buddhism and Hinduism, for Zelazny it seems to be inspired by the history he was trying to re-construct.

Thus, this wonderfully clever re-interpretation of the Hindu pantheon interjected by hints of futuristic and westernized life styles in the end projects the clichéd, and overused aspects of Indian culture: religion and spirituality.¹³² From this angle Zelazny’s effort is akin to the Romantic Orientalists, as we have already seen Heehs explain. He is fascinated by the possibilities offered to him by the Hindu mythologies; but rather than locating his story in the Indian past, he relocates the mythologies to the future. His interest does not have any colonial ramifications. However, his work inspires future works like Jensen’s *Shiva 3000* in similar Orientalist vein.¹³³ Zelazny’s use, and for that matter Jensen’s use too, of the Hindu/Buddhist conflict to engage into discourses of domination is in many respects similar to Sarukkai Chabria’s use of this same history in *Generation 14*. All these works pit Buddhist protestantism against Hindu oppression. However, whereas Sarukkai Chabria uses the Indian myths as subtexts of her critique against all forms of domination, both Zelazny and Jensen’s works are juggleries with unknown and mysterious traditions. The Indian author uses the myths for the

¹³² Examples of Western cultural influence and futuristic technologies are scattered all over the novel: sex-changed Brahma (previously Madeline), cigarette smoking Yama and Western classical music loving Siddhartha are few of the instances, not to mention the Rakasha repellent creams and video conference between Heaven and the temples.

¹³³ Canadian author of Indian origin Ven Begamudre’s “Out of Sync” however revisits a similar theme where the natives of the planet, beings of pure energy like the Rakasha, are brought into the focus. Like *Lord of Light* this story is also replete the fear of the rebellion of the aborigines. However, rather than extermination of one of the races, Begamudre suggests a form of hybrid existence that would be beneficial to all the parties.

purpose of creating a futuristic social critique. The Western writers construct futures for playing with the myths.

Zelazny's story deals with the theme of a future colonization, where the indigenous population, the Rakasha, is confined and marginalized, as happened in the real world not so long before the publication of the novel. The Western perspective can also be seen in the governmental aspect of the book. The non-Western system of governance instead of developing the quality of the colonized and the general settlers ends up being a system of "Oriental despotism." This is so very different from the perceived goal of colonization of the Western nations. Zelazny discredits Christianity too, and by implication Western form of colonization and spread of a monolithic ideal, by depicting Nirriti, the Christian chaplain of the Star of India, as even worse than Hindu despotism. He is seen as a pirate and a fanatic murderer bent on destroying anything that does not conform to his beliefs.¹³⁴ Nirriti's death at the end of the novel seems to indicate Zelazny's conviction in the more rational ways of Buddhism than in a "jealous God." Zelazny in *Lord of Light* seems to advocate a form of critical rationalism that undermines any type of authoritarian system—Oriental or Occidental. Nonetheless, the suggestion of authoritarianism in the Hindu hegemony seems to support the belief that Eastern, here Indian, societies are not progressive. It requires a man with a Western name, Sam, to bring them progress.¹³⁵

Shiva 3000 and the India Eternal

Influenced heavily by *Lord of Light*, Jan Lars Jensen's *Shiva 3000* (1999) is probably the epitome of the still persistent Orientalist attitude among Western writers dealing with India. The Canadian

¹³⁴ Nirriti is the goddess of death and corruption and is also the guardian of south in Hindu mythology. Although the character in *Lord of Light* is male, the association of lawlessness and southern location are very clear. Through the story's references to destruction of temples by Nirriti, he can also be associated to the Islamic invaders in the history of India, worshippers of a monotheistic God, who defiled Hindu and Buddhist temples.

¹³⁵ The association of the name itself should not be lost. The name Sam instantly reminds of Uncle Sam or the US.

author's debut novel almost stands outside the flow of history while unraveling the protagonist's adventure in the eternal and unchanging landscape of India. The book revels in exoticism as it narrates the stratified caste structure of Hinduism, incredulous cult of Kama Sutrān sex-worshippers, and living gods walking among fearful men. Jensen creates a future where the Indian populace has forgotten their past amidst false mythologies, while sentient machines have taken control of the society in the guise of gods. However, I argue, in creating this future Jensen only repeats Western discourses about the Indian past: superstition, casteism, irrational gods and mysticism. The landscape that he creates is the unchanging landscape described by the colonial Orientalists: the gods appear silly and monstrous, the architectures phantasmagoric and the people bound by rigid traditions. In addition to this, the "futuristic" technology in the book is almost fantastically comic. The novel uses the science fictional devices of cognitive-estrangement, but the cognitive part here wears really thin, while estrangement abounds. Thus, the novel appears on the verge of falling into the domain of fantasy rather than science fiction and suffers from a high dose of Western stereotyping. Rather than utilizing science fiction's capacity of futuristic vision the novel repeats all the clichés associated with the Indian past.

The focus of the novel is steadily fixed on matters of religion and sex. Jensen is interested in Indian religions in the sense of ritualistic practices and manifest systems; he sees religion as a control mechanism. His concern with sex also falls under a similar inclination. While religion is the control mechanism of mainstream society entrenched in formalized caste structures, sex appears as an alternative occult instrument. The secretive Kama Sutrān community uses sex as an alternative "opiate" to Hinduism, and, thus, as a similar device for control. However, as the name of the novel suggests, religion is seen as a more powerful tool than sex. In *Shiva 3000*, it is the key—regulating actions not only of the Indian population, but also of the story itself. The central action of the novel follows the quest of a Hindu boy prompted by his "dharma" (duty or religion in Sanskrit) and the will

of the gods to kill the “Baboon Warrior,” a popular mutant hero. Yet, Hinduism is not the only religion explored in the book; Jensen also shows the interaction between Hinduism and Buddhism, and Hinduism and Pragmatism—a fictional derivative of Buddhism. Inexplicably though other prominent religions of India—Jainism, Islam, Sikhism and Christianity—are completely absent in this future. The Hindu hegemony is absolute. Although such absence can be seen as an anticipation of Hindu fascism (similar to the critique in *Signal Red*), survival of such a minor religion as Buddhism instead of the larger minorities raises some doubts regarding Jensen’s goals. The Buddhists and the Pragmatists provide critical commentaries on the pitfalls of such hegemony, as well as on Hinduism as a religion and Indian society as a whole.

This commentary, however, in actuality is Jensen’s Western understanding of social dynamics and rationality projected onto a non-Western civilization. The effect is a grotesque fusion of various negative Orientalist attitudes, especially, in Heehs’ scheme, of colonial “Romantic Orientalism” and postcolonial “Reductive Orientalism.” In fact, *Shiva 3000* straddles both these categories. The Canadian author does not have any ideological stake in modern India that would compel him to write in an Orientalist manner. Still, Jensen constructs India as an exotic space, where anything is possible. It is a space beyond logic and rationality—an antithesis of the orderly Western world. Jensen’s depiction of India corresponds with Jitesh Parikh’s theorization of colonial and postcolonial Canadian literature on India as highly sentimentalized. In *India in Canadian Literature* (1999) Parikh says:

During the colonial period India was viewed [by Canadian authors] with Imperial bias and consequent prejudices. As a sharp contrast to it there emerged the second trend in the post-colonial time with a pluralistic vision. [. . .] It recognises the cultural differences which are celebrated romantically. Consequently, a mythic India fascinates Canadian writers who tend to associate myths and characters to interpret their visions of India. [. . .] Both these positions mark a move away from the reality. (xii)

Although Parikh also discerns another trend (he terms this “Curatorial”) in Canadian writing about India, which he considers more balanced, *Shiva 3000* undoubtedly belongs somewhere between the first two approaches—“contemptuous sentimentalism and appreciative sentimentalism” (xii). Thus, similar to many other Canadian texts on India, *Shiva 3000* constructs India in an unreal and fantastic manner.

The total geographical isolation in which Jensen’s India exists transports it almost outside normal time and space. The god-like machines that reign over India are the expression of a stranger staggered at the immensity and incomprehensibility of the Indian, Hindu, spiritual vision; at the same time, they reflect the futile, almost menacingly redundant, nature of Hindu religiosity to the Western writer. This perception is most poignant in the oft chanted “mantra” that calls the god Jagannath into action: “sim wi ta sicc’ m, ep fel sim.” This seemingly important phrase that calls the god is a collection of meaningless sounds—a figment of Jensen’s imagination. These words do not even belong to any Indian language, definitely not to Sanskrit, the language in which almost all Hindu religious communications are held. Although it is hard to tell if Jensen does this deliberately, to underline the meaninglessness of Hindu rituals, or out of his ignorance of Sanskrit, the result is a total undermining of Hindu religiosity.

The implication of the destructive god Jagannath is, however, more important. In Jensen’s India the gigantic figure of the Jagannath represents the cleansing power of wrathful divinity—it is called upon by its devoted priests to destroy the cities filled with corruption. The god also represents the power beyond any reason, a power that doesn’t distinguish between good and evil once it rolls on its wheels of destruction. However, this fearsome Jagannath is later exposed as a sentient machine driven by a group of Brahmins, and is taken over by the protagonist, Rakesh, in pursuit of his own quest. This

situation ultimately calls the reader's attention to the worthlessness of Hindu religion, which becomes a tool in the hands of a privileged few to control the mass. Although it can be argued that this is Jensen's way of critiquing militant Hinduism that was on the rise during the 1990s, an excess of exoticism and a clear lack of understanding regarding Indian politics and culture evident in various places in the book make such an interpretation questionable. This type of portrayal of Hinduism, in a way, is combining the exotic with the vain. In other words, Jensen's attitude here reflects a mixture of "Romantic" and "Reductive" Orientalisms delineated by Heehs.

Jensen's exoticism does not stop at this though. By playing on the figure of Hanuman, the monkey-god (or demigod to be more accurate), he comes up with the heroic persona of the Baboon Warrior, the redresser of all evil. However, this hero also serves as a device of ridiculing the Hindu habit of animal worship, to the extent that he creates a whole village of humans acting as monkeys in imitation of their hero. The heroic tales of the Baboon, who defeats many gods in battle, also show the incredulity of the Indian populace in matters of religion. Nevertheless, it is inexplicable why Jensen uses baboon, a species found nowhere in India, as a choice for Hanuman's futuristic incarnation. Similar incredulity is exhibited at the site of a woman's burning because of her alleged infidelity. The strongest sense of Jensen's skepticism, although, is seen in the protagonist Rakesh's belief that he is destined to kill the Baboon Warrior—that it is his "dharma" ordained by the goddess Kali. This belief leads him to deeds of extreme audacity almost like a man physically driven by a divine force.

Nonetheless, for all their exoticism, these incidents create an air of mystery and irrationality that corresponds with the tone of epic quest in the novel. These elements rather place India as an alternative reality that does not belong to the historical realities and, consequently, beyond laws governing such realities. The logical explanations of these exotic elements, however, undermine and

reduce the nation's culture to the level of mockery. Rakesh's "dharma" that affects him physically whenever he wavers from the quest, turns out to be a genetically engineered organ on his (and all Hindus') spine. This "chakra" manipulates his thinking and makes him compliant to the religious doctrines. This explanation takes away the epic quality of his quest and reduces the customs of Hinduism as effects of a biological control mechanism. The close of the novel also reveals that rather than being an alternative reality, Jensen's India is located in our universe in the far future (may be in 3000 AD, as the name suggests). The gods that roam the earth turn out to be machines controlled by advanced rogue AIs, who reign over a regressive Indian population; and the Baboon Warrior is a genetically engineered control mechanism for the god-machines. Baboon's adventures as recorded by the Pragmatic historians also attest to this and undercut the exaggerative tendency of the Hindu literary tradition.¹³⁶

The book's focus though is not only fixed on religious/mythological fantasies, but also on sexual exoticism. What comes as a surprise is that Jensen doesn't even go beyond the obvious; he directly names the secretive cult of pleasure seekers after the most famous sex-manual in the world—the *Kama Sutra*. However, Jensen's creation of this subversive cult that corrupts the Indian populace and seeks to control the administration in the national capital through manipulating human propensity for pleasure is very effective. The spectacular metropolis of Khajuraho and the strange customs and devices of this cult at once suggests a vivid imagination and also exposes the suppressive nature of Indian society. Jensen creates a dichotomy between social and sexual orthodoxy and libertinism through the contrasting attitudes of the Royal Engineer Vasant and the Kama Sutrans. However, Vasant's own delinquency with the First Wife (the queen) and putting the blame on the cult suggest

¹³⁶ Two different accounts of the Baboon's adventures exist. The popular account portrays him as a quasi divine hero engaged in epic battles with gods. The Pragmatist account, however, shows him as a person with knowledge of advanced technology, dismantling mechanical components of the god-machines, thus rendering them inoperable.

that Vasant himself suffers from an internal turmoil—between natural instinct and repressive social decorum. While mainstream society is bound by rigid social and religious customs, the world of the Kama Sutras functions on bodily impulses and sexual desires. The ordinary Indian society functions through various types of fear—of the gods, of the King and of the norms of a caste bound society; violence always lurks at every corner. Kama Sutras provide an alternative to it. They shun violence and reject domination through fear. They seek to make pleasure and work equal. But, as becomes clear later on, Kama Sutras too seek to control people by playing on their libido. In other words, Jensen censures any form of irrational belief or system as a tool at the hands of a manipulative authority—be it exploitation of the spirit or that of the flesh.

The power of kingship is also a part of this equation. In the novel, India has reverted back to a feudal power structure, with the Sovereign at the top. In this structure the people's allegiance to the sovereign is partly fueled by a need to be subservient to a power symbol—preferably embodied by a patriarchal figure. When the Sovereign dies and the First Wife takes over, chaos spreads throughout the country, which subsides only at the end of the novel with her marriage to the Baboon Warrior. This situation also indicates the overtly patriarchal structure of the Indian society, where a woman can only find legitimacy under male protection. However, this faith in a patriarchal power structure is shown as a lesser evil than living under a false theology. After all, even if the First Wife has to marry the Baboon Warrior to find legitimacy for her rule, she does that out of her own volition. Here human agency is fully present. She kills the Sovereign for his infidelity, manipulates Vasant, Prince Hapi, and even the Kama Sutras to implement her plans. And ultimately marries the Baboon through the elaborate ploy of stringing of “the Harmony Bow” (251).¹³⁷ Although this places her at the position of the typical manipulative female, she does all these because she cares for the country: “But I want what is best for

¹³⁷ A clear reference to Lord Rama's stringing of the bow to marry Lady Sita in the Indian epic *Ramayana*.

India! Can't you understand? Only someone with the stature of the Baboon Warrior can return stability. That's the only reason I agreed to wed him" (256). Although, the Baboon dies at the end of the novel, the intricate political maneuvering performed by the First Wife is ultimately endorsed, because it clearly shows human agency against the superior power of the gods and social orthodoxy.

In contrast to this, Rakesh's obsessive pursuit of the Baboon, which he apparently does out of his desire for revenge, turns out to be an errand programmed into him by the gods. Thus, he does not in reality have any agency over his own actions. Rakesh suffers physically whenever he wavers from his path. Still, he is not prodded at every step through physical means. His existence within the ideology of Hindu casteism has already made him compliant to the commands of the gods; his literal interpretation of the orthodox social hierarchies only smoothes his path towards the goal. Being from the Vaishya caste (traders/craftsmen), he always keeps a respectful distance from the Kshatriya (ruler/warrior caste) Vasant, and the Brahmins (unless there is an absolute necessity to kill them), and demonstrates disdain for the low-born. The same attitude can be seen in Vasant in his contempt of the Pragmatists and in his highhanded treatment of Rakesh, even after he saves Vasant's life. Yet, both he and Rakesh come out of this attitude at the end of the novel. Rakesh falls in love with Yamuna, a Pragmatist woman, and refuses to kill the Baboon; and Vasant realizes the superficiality of the caste system. He says to the First Wife: "This time away from Delhi has been revealing to me. I've seen hedonism, decadence, lack of chastity, lack of self-restraint. You demonstrate for me that caste is no defense against moral lapses" (256).

Such indictment of the caste bound Hindu society starts from the very beginning of the novel: first through the ill-treatment of the Buddhist monks in the first chapter and then through the Pragmatists' observation of the Hindu society. Jensen conceives Pragmatism as a derivative of

Buddhism—sans the non-confrontational aspect. Their mountain castle in Ranthambhore is very similar to the Buddhist monasteries seen in Hong Kong martial-art movies, especially in its disciplinarian and communitarian aspects. The ultra-rational Pragmatists stand as the anti-thesis to the irrational Hindus. They are continually studying, analyzing and recording everything around them. Their superb archery skills and vast knowledge are results of extreme concentration and methodical coordination—exact opposite of the chaotic Hindu milieu. Their single minded dedication to the commune also stands in contrast to the self-serving Hindus. The Pragmatists hold no prejudice and reach no conclusion until proven, while the Hindus in the novel exist in a preordained society, where everyone's place and role in life has already been decided. The Pragmatists come closest to the Western notion of rationalism. And it is through them that Jensen critiques Hindu society.

However, for all its positive sides, the communitarian life of the Pragmatists reaches a point of perfect rational anonymity that they lose their individual identities to the group. They even forget their parents and lose all sense of individual existence. Jensen suggests this is also a loss of identity. His rejection of this type of collective existence is clear when the old Pragmatist Firdaus kills the Baboon Warrior to release Rakesh from his obsession, so that he can marry Yamuna and live life as an ordinary man. It is revealed that Yamuna is Firdaus' daughter; although the pragmatist mind control has erased Yamuna's memory of her parents, Firdaus defies such anonymity to assert his love for his daughter. Jensen seems to say that only love can release people from social bondage: love between man and woman, love of father for a daughter, and ultimately love for life. This is not subservience veiled as love for god as professed by religion, or lust of flesh disguised as conjugal love as preached by the Kama Sutras. This love is spontaneous, not controlled by any system or doctrine.

Thus, Jensen's marginal treatment of Buddhism, which operates on love and compassion, is also understandable. It is still a system. However, Jensen's fixation on Buddhism as an antidote for the ideological hegemony of Hinduism, both through the real Buddhists and the Pragmatists, is more of an imitation of an earlier work than a real science fictional speculation based on present social dynamics. In a way, the whole of *Shiva 3000* is a makeover of Zelazny's *Lord of Light*. Jensen though relocates the locale from a distant planet to Earth and to real geographical India. Zelazny's novel profits from its restructuring of the Hindu and Buddhist mythology by creating distances of both space and time; Jensen's estrangement only on the temporal scale, while keeping similar interpretive mythological elements, weakens the effect. Zelazny in a way reconstructs the history of religious reformation in ancient India by playing Buddhism off as a technique to counter Hindu hegemony. But, while it works on a world other than Earth, using the same framework to speculate about the future of real India creates certain problems. One major objection can be the minimal number of Buddhists practicing their faith in India (only 0.8% of the population); it is really hard to believe that such a small number would really provide a proper situation of conflict. The religion that is in constant conflict with Hinduism is Islam; and since they exist on completely different conceptions of divinity, they can hardly be compared to each other without any bias. A very close connection between Hindu and Buddhist religions also does not lend itself to the type of conflict Jensen depicts. Although Jensen is speculating about the future, it is still hard to see the type of exclusionary behavior between Hindus and Buddhists as depicted in *Shiva 3000*; after all the Hindus have worked hard to incorporate Buddha within their religious scheme by designating him as the ninth avatar of Lord Vishnu. Such historical integration suggests an inclination towards inclusivity, not rejection. The last couple of thousand years also bear testimony to that.

Jensen, however, is more bent on emulating Zelazny than creating something new and original. The important thing to note here is that *Shiva 3000* tries to imagine the Indian future by using the conventions of science fiction, where the novel rather than coming up with something new or futuristic ends up reinforcing all the Western stereotypes. It also becomes very clear that Jensen was more inspired by Zelazny's novel than by India in his attempt to write this novel. He shows lack of knowledge about the people and culture of contemporary India; without such knowledge futuristic speculations run wild. That is precisely the case with *Shiva 3000*. What he knows is the staple exoticism of sex and religion strewn throughout Western Orientalist discourses; and by re-imposing those clichés on the Indian future Jensen condemns the future into a limbo of timelessness—it is no different from the past. Zelazny's *Lord of Light*, Jensen's inspiration, also engages in mytho-religious exoticism, but it is rescued from becoming just another book about the Orient because of the originality of its imagination.

However, deploying mythical elements in a futuristic context does not always result in an out and out Orientalist narrative, as will be evident in our discussion of *River of Gods* and *Cyberabad Days*. It is the overall attitude towards the culture concerned that makes it so. It is plainly visible that Zelazny and Jensen are not really interested in the present and the future of India; they savor the exotic past. The future only serves as a device of defamiliarization for their “techno Orientalism.”

Cybernetic Divinities and a Split India in *River of Gods* and *Cyberabad Days*

British author Ian McDonald's award winning 2004 novel *River of Gods* and his 2009 short story collection *Cyberabad Days* are probably the best efforts so far in imagining a futuristic Indian society

in Western science fiction.¹³⁸ Paul McAuley mentions in his introduction to *Cyberabad Days* that in science fictional terms, “depictions of the future aren’t evenly distributed either: the majority of science fiction depicts futures dominated by American sensibilities and cultural and economic values, and inhabited by solidly American characters” (9). However, McDonald along with such writers as Paulo Bacigalupi and Maureen McHugh mounts a legitimate effort to present the future in non-American and non-Western contexts. For our purpose, examining the Indian futures in Western science fiction, I argue that McDonald displays a more sincere interest (which will become clear in the course of our discussion) in the complex socio-cultural fabric of India than either Jensen or Zelazny do. Yet, he does not totally discard the mythological elements that Zelazny so effectively utilized in his space-pioneering fiction, and Jensen exploited to create a twenty-first century Orientalist fantasy. In projecting the future social milieu, McDonald rather reinvents the nature of the divine—not in the same way as the North American authors did. Whereas both Zelazny and Jensen portrayed the Hindu myths and religion as devices of social control—by mutant humans or rogue AIs—McDonald creates entities akin to supernatural by manipulating cybernetics and the spatio-temporal fabric of the universe itself, which can only be articulated through a mythical mindset. Thus, McDonald’s cybernetic-gods pervade the daily and the mundane as well as the exceptional and the violent life of future India—just as the “real” gods do even today.

McDonald’s version of India of 2047 (around which time the stories of both the books are situated) is a chaotic coexistence of high-tech cybernetic civilization and an age old religious and mythological tradition. It is a place where the scientific and the supernatural exist together—

¹³⁸ *River of Gods* received British Science Fiction Association award for best novel in 2005, and *Cyberabad Days* includes “The Djinn’s Wife,” the winner of BSFA award for short fiction in 2007.

continually reinventing and being reinvented by each other. As Mark Teppo says in his review, *River of Gods* places this coexistence in a proper twenty-first century perspective:

While the Indian intermingling of reality and mythology is an important part of the resolution of the novel (as well as being responsible for a great deal of the rich texture of the book), in *River of Gods* McDonald is also building a true 21st-century novel, recognizing the growing influence of cultures other than the US in the global Weltanschauung. In a book that winds itself around a discussion of God and the Machine, India—with its ready acceptance of supernatural beings and its increasing footprint in the Information Age—is well suited to be the focal point of this discourse. It is what mythologist Mircea Eliade called the "epiphany"—the point where the sacred touches the profane and God manifests Itself. (Strange Horizons)

Teppo's perspective is relevant for several reasons. First, although *River of Gods* exploits the exotic mythical elements of Indian culture, it chooses to do so in an advanced cybernetic context. The gods of the Hindu pantheon become digital representations of high-tech electronic gadgets or advanced artificial intelligences suited to their divine qualities (e.g. Indra, the god of thunder, becomes the icon for a gun capable of destroying both man and AI). All these AIs ("aeais" in McDonald's world) and machines are connected directly to the human brain through man-machine interfaces termed "hoek" and "palmer." It is important to note that these gadgets are strewn throughout the Indian society as cell phones are today. This implies that the India of the future is a place where people engage with advanced technology on a daily basis. The book deals with the near future, 2047 AD—the hundredth year of India's independence. These spatio-temporal coordinates are important: these are space and time readily recognizable, geographically and culturally, as India, yet are different from today. To put this differently, McDonald extrapolates his future from the current socio-political and technological trends in India, signifying not only his awareness of the Indian present, but also his effort to get out of the Western habit of going back to the past.

This is very different from both Jensen and Zelazny. *River of Gods* boldly confronts the chaotic Indian reality by projecting solid Indian characters in identifiably Indian settings. It does not transport

India into a spatio-temporal limbo like *Shiva 3000*. Neither does it leave Earth to reinterpret Hindu mythology in a futuristic high-tech context as in *Lord of Light*. And most importantly, McDonald is deeply connected with the India he is depicting, not just using it as a story telling device. This interest is evident not because most of the actions in *River of Gods* and all actions in *Cyberabad Days* are set in India, but because McDonald treats India as an important geopolitical entity of the twenty-first century with concrete temporal and spatial realities.

Taking into consideration the recent separatist movements in various parts of the nation, McDonald presents India of 2047 as a conglomeration of smaller independent states—Bharat, Awadh, Bangla, Maratha etc.—engaged in a regional power struggle. But, interestingly, McDonald’s divisions are not based on faith or ethnicity; rather it is mostly a linguistic partition.¹³⁹ Furthermore, he addresses the predominant environmental issue of water conservation and inter-state disputes over river dams. In India of 2047 the monsoon has failed for three straight years and the river Ganges, “the river of gods,” is flowing thin, giving rise to specters of war between the states on the Gangetic plain of Northern India—Awadh and Bharat. The water wars mark the background of *River of Gods*, as well as of the stories collected in *Cyberabad Days*. Both these geographical elements taken up by McDonald have real resonances in present day India. As we have already seen in the discussions on *Last Jet-Engine Laugh* and *The Calcutta Chromosome*, water conservation has become a major issue in India and is being taken up by the Indian writers themselves, suggesting further problems in the future. Additionally, it also shows McDonald’s awareness of the ground realities of the country—the monsoon based agriculture. Moreover, the divided India that we see in both these books is only a logical conclusion of the dozens of separatist movements fomenting all over the country—the Muslims in

¹³⁹ Although separatism often grows out of religious or ethnic affiliations, linguistic regionalism is also present in India. Recent assertion of linguistic politics in Maharashtra between Marathi and Hindi speaking population only bear witness to it. Similar tension has also been seen in the past in Assam.

Jammu and Kashmir, the tribes in the North Eastern states of Assam, Nagaland, Manipur and Mizoram and the Maoists of central India.¹⁴⁰

McDonald also shows an acute awareness of the Indian social fabric through the foregrounding of the cohabitation of contradictory forces in the Indian landscape. The main action of the novel takes place in Bharat and its capital Varanasi—one of the oldest cities of the world. The city itself becomes the embodiment of the contradictions existing side by side in India—beneath the glitzy skyscrapers of New Varanasi exists the shabbiest of the slums, the superstitious devotees pay their obeisance to the river Ganges on which float the decrepit barges containing high-tech AI operated bio-labs that can literally create new human beings out of old ones, and a god-loving Hindu entrepreneur's son opens up the door to another dimension through his “zero-point energy” project. This India is best described by the protagonist of the novella “Vishnu at the Cat Circus” in *Cyberabad Days*:

Only by removing myself from them could I begin to understand these two nations. India was a place where the visible and the invisible mingled like two rivers flowing into each other [. . .]. Humans and aeais met and mingled freely. Aeais took shapes in human minds, humans became disembodied presences strung out across the global net. The age of magic had returned, those days when people confidently expected to meet djinns in the streets of Delhi and routinely consulted demons for advice. India was located as much inside the mind and the imagination as between the Himalayas and the sea or in the shining web of communications [. . .]. Bharat was poor. Bharat had cracked hands and heels, but she [. . .] cleaned and swept and cooked and looked after children, Bharat drove and built and pushed carts through the streets and carried boxes up flights of stairs to apartments. (265)

Here Bharat does not signify the new splinter state, but the indigenous Sanskrit name for India—

Bharatvarsha.¹⁴¹ The two names correspond to the two worlds existing side by side in this country.

Vishnu, the protagonist of the story associates “India,” the name assigned by the Western world, to signify urban (usually wealthy) Westernized-postindustrial-cybernetic society existing as much in

¹⁴⁰ However, the Maoists are not exactly separatists; they are rather rebels against the government authorities, but do not ask for a separate state or country.

¹⁴¹ The official Hindi name for Republic of India is Bharat Ganarajya.

material world as in bytes of data stream; “Bharat,” the original Indian name, however, connotes the rest of the nation—the traditional, non-technological, solidly agrarian, rural India—where the heart of the country still exists.

This contradiction can also be seen in the composition of the share holders in Ray Power Company in *River of Gods*—they range from straightforward businessmen and village micro-credit organizations to an economic front for a sentient AI. This incongruous coexistence of highly advanced technology with references to still traditional rural life, however, does not seem out of place in McDonald’s future India.¹⁴² And he keeps on buttressing this contradiction in myriads of ways throughout the voluminous novel, as well as in the short stories.¹⁴³

Set in the same fictional universe, both *River of Gods* and “Vishnu at the Cat Circus” turns on the cogs of M theory that explains the structure of the universe as manifolds of multiple dimensions, and of John von Neumann’s self-evolving AI theory, combined with the assumption that AIs can evolve sentience over a worldwide distributed network.¹⁴⁴ There are two major implications of these complex theories of physics, mathematics and computer science. The first one, related to M theory (M-Star theory in the novel), opens up a new dimension construed as a universe of cellular automata—a universe the dimensional fabric of which engenders intelligence. It is a perfect universe for evolution

¹⁴² It may at the first glance seem a cyberpunk common place of high-tech gadgets and low quality of life, with social misfits and rogue characters like Shiv and the “datarajas” playing crucial roles. But, a second look will immediately confirm the scenario as something much more complicated.

¹⁴³ McDonald combines the superstitious belief in djinns and ghosts with concepts of computerized nano-machines that can literally simulate a human body by working in swarms in “The Djinn’s Wife,” creates a dialogue between the divine and the cybernetic in “The Little Goddess,” juxtaposes cyberpunk trope of teenage computer wizards manipulating killer robots with the story of a rural immigrant in “Sanjeev and Robotwallah,” and, most notably, through the coming together of the concepts of god and machine, as well as religion and cyberpunk in *River of Gods* and “Vishnu at the Cat Circus.”

¹⁴⁴ Clearly alluding to M-Theory or Superstring Theory as the references to Wolfram mathematics and Calabi-Yau spaces seem to indicate.

of intelligence—organic or inorganic. The second implication, derived from self-evolving AI theory, gives rise to a set of dispersed AIs functioning from within global stock market networks, a simulated evolution of Earth software running on millions of computer terminals world-wide, and a software generated Bharati soap opera (“Town and Country”). These AIs attain a level of evolution that is nothing short of divine, justifying their names of Brahma, Vishnu and Kalki. They are thousand times more intelligent than the human brain and can manipulate human action in such clever ways that they all appear as results of human social dynamics, and ultimately opens up the portal to another universe, into which these AIs pass to evolve without confrontation with humans.

The book suggests that these phenomena of immense power, which stretch and bend the fabric of the universe, place the dispersed AIs at the same level as gods: engendering, sustaining and destroying new universes. The repeated allusion to Hindu gods and the avataric terminology only reinforces the associations, the most important of which is the evolution of Kalki, the Generation 3 AI that leads to the ultimate man-machine confrontation and creation of a new universe for the AIs.¹⁴⁵ This development in a way parallels the myth of Kalki, the tenth and last avatar of Lord Vishnu, who arrives to end the corrupt last age of man (the age of Kali) through violence and initiate a new beginning. Only here the myth has been transferred to the divine machines, thus underpinning the juxtaposition of the mystical and the mechanical.¹⁴⁶

¹⁴⁵ Kalki in the book is the evolutionary level of AI that is indistinguishable from humans in behavioral patterns. *River of Gods* depicts Kalki as a young woman, Aj, with brain hardwired to a world-wide network of AIs, giving it godlike ability to control every machine in her vicinity and giving her full access to a gigantic information stream. It is the true man-machine union. However, Kalki has to die at the hands of the Krishna Cops, who terminates rogue AIs, signifying a failure of such coexistence. Consequently, the AIs transport themselves into the new universe opened through Ray power’s “zero point energy” machine, signaling the end of an era of corrupt man-machine relationship, and the beginning of a golden age of AIs in a new cosmos.

¹⁴⁶ In Vandana Singh’s “Delhi” a similar juxtaposition of the machine and the mystical can be seen—in the form of computerized astrology. In this story, the causality effect and temporal overlaps are used in such a way that they first appear

McDonald shows further involvement with the society he was creating not only in creation of the quasi-divine AIs that reflect the cohabitation of the effable and the ineffable in the Indian culture, but also in the clash of rationality and irrationality in the Indian socio-political sphere. He creates the character of N.K. Jivanjee, the leader of the Hindu fundamentalist party, who is actually a manifestation of a super AI. McDonald portrays Jivanjee as a wily politician trying to exploit the religious zealots against a secular government. It becomes very plain that McDonald bases Jivanjee on real life BJP supremo L.K. Advani.¹⁴⁷ The names are somewhat similar sounding; the religious agitation in streets over the proposed destruction of a statue is very similar to overzealous Hindu hardliners; the killing (including that of the Prime Minister) and destruction of non-mainstream section of the population in the riot following the military setback against Awadh reeks of the religious riots so often associated with Hindu rightwing politics. The most obvious hint, however, is Jivanjee's proposed cross-country "rathayatra" (chariot-ride) echoing similar tactics embraced by Advani in 1990 to challenge the politics of minority appeasement practiced by the secular government of India. Such resurgence of hard-line Hindu nationalism permeates the whole socio-political fabric of contemporary India, where advanced technological civilization is no safeguard against the pitfalls of irrational impulses of religiosity and superstition. This is very similar to Rimi B. Chatterjee's position regarding religious fundamentalism in *Signal Red*, where she depicts a total disconnect between reason and technological advancement. McDonald only takes this scenario to an extreme point by turning Jivanjee, the leader of the religious fundamentalists, into an AI, functioning solely on extremely

as astrological foreknowledge or ghosts from the past. Only after a certain time the protagonist's power to see the temporal anomalies become clear. In fact, in present day India "scientific" computerized astrology is becoming very popular.

¹⁴⁷ See discussion on *Signal Red* for more information on violent Hindu nationalism.

advanced logic.¹⁴⁸ Such echoes of real India are strewn in various places not only in the novel but also throughout the pages of the short stories.

One such aspect, which McDonald takes to the extreme, is the gender imbalance in the present Indian society. The already lopsided ratio of 1.12 males/1 female (at birth) and a largely patriarchal social structure only bodes what McDonald portrays in his future India.¹⁴⁹ As the narrator in “An Eligible Boy” explains:

A lovely boy was how it began. A fine, strong, handsome, educated, successful son, to marry and raise children and to look after us when we are old. Every mother’s dream, every father’s pride. Multiply by the three hundred million of India’s emergent middle class. Divide by the ability to determine sex in the womb. Add selective abortion. Run twenty-five years down the x-axis, factoring in refined, twenty-first-century techniques such as cheap, powerful pharma patches that ensure lovely boys will be conceived and you arrive at great Awadh, its ancient capital Delhi of twenty million, and a middle class with four times as many males as females. Market failure. Individual pursuit of self-interest damages larger society. Elegant to economists; to fine, strong, handsome, educated, successful young men like Jasbir caught in a wife-draught, catastrophic. (80)

Such insight into the biggest challenge facing Indian economy of the twenty-first century further demonstrate McDonald’s attempts to understand the social dynamics of India. Similar concerns with female infanticide and gender imbalance have given rise to several social critiques by indigenous intelligentsia, the most moving of which is probably the Manish Jha directed Indo-French movie *Matrubhumi* (2004). This future-dystopia film, however, does not delve into high-tech society; rather it goes to the extreme logical conclusion of an uneducated rural population completely under patriarchy and treating women as objects of possession.

¹⁴⁸ Other political echoes are also present in the novel: the powerful woman prime minister of Bharat, Sajida Rana, coming from an aristocratic family, also reminds of another powerful woman leader in Indira Gandhi. Both of them die through the conspiracy of their bodyguards.

¹⁴⁹ CIA World Fact Book

The future India that McDonald creates speaks of deep efforts to understand the nation's past and present before speculating about its future. No wonder McDonald had to spend a considerable length of time in the country.¹⁵⁰ This is so much different from both Zelazny and Jensen. One reason behind this awareness of real world situation in India might be the long history of colonization that connects India to Britain. That bond of material struggle is far more concrete than an outsider's passing interest that North America has. But, McDonald's own identity, born of an Irish mother and a Scottish father, and living in Northern Ireland, also holds a key to the understanding of the postcolonial world in his writing. As he himself claims, "I write as a resident of one of the British Empire's last (and first), and unconsidered colonies, Northern Ireland" (email).¹⁵¹

Nevertheless, for all his empathy with his subject, McDonald ultimately remains an outsider overwhelmed with the chaotic vastness of India. Despite his clever manipulation of science fictional conventions, and despite his thorough presentation of the nation and the Indian characters, McDonald's approach displays residues of Romantic Orientalism in its fascination for Indian gods and the Hindu religion. Although he reinterprets such religious discourse in a cybernetic context, they remain what they are—conversations on religion and spirituality—subjects that have been the area of interest to the

¹⁵⁰ In his email correspondence with me, McDonald writes:

I have visited India, and travelled quite a bit. I couldn't possibly hope to write about a place if I haven't been to it (excepting, of course, places like Mars, or Epsilon Eridani, though if someone could arrange that quickly and cheaply, I'd be up for it). I spent some time there—and my one writerly gift is a very good visual memory and eye for patterns in society and in human behaviour (I hope). I also have a day-job: I worked [. . .] in an animation studio, where we work with a lot of Indian animators, both here in Ireland and sub-contracting out to India and I've got to know a lot of them very well.

¹⁵¹ McDonald explains in his email:

India is undoubtedly one of the great nations and cultures of the world, and part of the reason I wanted to write about was because, when I first had the idea in 1999, India was a huge blind spot on the US mental map of the world. Say Asia to Americans and they immediately think of China or Japan. On this side of the Atlantic, because of the old UK Imperial adventure, we tend to think India, Pakistan, Bangladesh, and I wanted to try to correct what I thought of as an American cultural bias.

McDonald goes back to the postcolonial societies over and over again in his fictions. Not only does he tackle the chaotic milieu of India, he repeatedly goes back to the developing world to focus on twenty-first century science fiction themes—*Chagha* is set in Africa and *Brasyl* in Brazil.

Westerners for the last few hundred years. From this aspect, McDonald does not stand too far away from his North American counterparts. Both *River of Gods* and most of the tales in *Cyberabad Days* do not move beyond the discourse of exoticism; rather they only reframe the issue from a more technological aspect.

Furthermore, by juxtaposing the tropes of godhood and religiosity on to a highly technological and scientific topic, McDonald attempts to quantify the unquantifiable. This approach is most visible in the naming of the parts of the book—"Ganga Mata," "Sat Chid Ekam Brahma," "Kalki," "Tandava Nritya" and "Jyotirlinga." In a cryptic manner these titles follow the divine flow of Hindu cosmology. Ganga (Ganges) being the divine river, signifies this flow. "Sat Chid Ekam Brahma," which in Sanskrit literally means "true consciousness is one with the universe," may signify the beginning of consciousness, while "Kalki" implies the last age of man. The titles can also be read as referring to Brahma (the phrase is a part of the Brahma mantra), the creator, and Vishnu (Kalki being an avatar of Vishnu), the sustainer. The last two parts "Tandava Nritya" and "Jyotirlinga" both refer to Shiva, the destroyer. While "Tandava Nritya" (dance of destruction and creation) may refer to annihilation, "Jyotirlinga" (literally "the phallus of light") supplies the phallic imagery in a cosmic scale that may signify a new beginning. These religio-mythical ingredients create a subtext from where the divine and the scientific seem to come together in the novel.

However, the discourse of faith is beyond rational explanation; it does not operate on the same paradigms as science; especially, not Western science. McDonald's attempts to relate these two reflect the archetypal Western habit of seeing the world through the lens of rationalism and science, and

validating all other forms of knowledge through scientific associations.¹⁵² When such associations fail to explain the nature of the phenomena operating outside the scientific paradigms, the Western vision becomes occluded and overwhelmed.¹⁵³ Thus, in *River of Gods* Ranajit Ray's (the founder Ray Power Company) renunciation of worldly concerns and ultimate transformation into a penniless holy-man is presented through a fog of incomprehensibility. This is the alluring spiritual aspect of India: always beckoning, yet never open to the Western man. Ray worships the goddess Kali in preparation for the end of the last age of man—the Kaliyug. His Western educated son, Vishram, and his European girlfriend-cum-lawyer, Mariana Fusco, are excluded from this ritual. The same reason can be found behind the Nepalese Kumari's transformation from the embodiment of heavenly powers to "brain-hardwired" goddess of small things in "The Little Goddess."¹⁵⁴ McDonald seems to be overwhelmed by India in creating his future world as E. M. Forster was while seeking his passage to the heart of the country in *A Passage to India* (1924). It seems, these occlusions are reverberations of the echoes of Marabar caves in Forster's famous novel that profoundly shook the Western outsiders, Mrs. Moore and Adela Quested, spiritually and psychologically and ultimately prevented them from discovering the real India.

Similarities can also be seen between these two writers in their attempts at creating a non-Orientalist discourse about India, which is still primarily seen through Western characters. As Forster's novel is largely interpreted from the point of view of Fielding, McDonald's book is strewn with a number of Western interlocutors, the most important of whom are the American scientists Lisa Durnau

¹⁵² In a way this approach also connects McDonald to the proponents of Vedic science and their attempts to prove Hinduism as a scientific religion.

¹⁵³ Amitav Ghosh's *The Calcutta Chromosome* explores such inabilities of Western science and challenges the epistemological orientation of Western modes of knowing.

¹⁵⁴ A Kumari is seen as a goddess in the human form.

and Thomas Lull. They are the people who interpret the whole action of the novel and in a sense they set everything in motion by creating the self evolving AI of “Alterra.”¹⁵⁵ Furthermore, in almost every stream of the tangled narrative there is a Westerner working as link. In Tal and Saheen Badur Khan’s stream, Swedish-Afghan Najia, working for an Australian news paper, plays the role, while Mariana does the same in Vishram’s stream. Western-educated Vishram himself is also a link between the East and the West. Only Shiv and Mr. Nandha’s stories are free of any such presence. Then again, Shiv’s love of Mercedes SUVs and Mr. Nandha’s love of Italian classical music defines their characters through Western-connections, albeit on a different level.

However, McDonald largely discards his Western interlocutors in the stories of *Cyberabad Days* published five years after *The River of Gods*. In fact, other than “Kyle Meets the River,” which narrates the story of an American boy in a war-torn Bharat, we do not meet a Western character of importance in any of the stories. Thus, although still dealing with the exotic aspects of Indian society, he definitely displays a dynamic understanding of the country that mitigates his techno-Orientalism of the new millennium.¹⁵⁶ Such dynamism, albeit in the completely different context of international politics, can be seen in Humphrey Hawksley’s *Dragon Fire*, which completely displaces the Western exoticism holding such prominence in the other works. Yet, Hawksley’s novel also shows that displacing exoticism does not always result in an improved understanding of a society.

¹⁵⁵ Alterra is the simulation software for alternative evolution of Earth.

¹⁵⁶ In “The Dust Assassin” he even deals with the legend of “Vish-Kanya” or poison girl, a girl whose kiss kills, through the trope of genetic modification.

India and the Bomb: Doomsday Scenario of the Twenty-First Century in *Dragon Fire*

British writer Humphrey Hawksley's 2000 novel *Dragon Fire* unlike the works discussed above discards exoticism all together when it comes to projecting the future of India. This novel is rather an extrapolation of the political and technological developments in the South and East Asia over the last fifty years. Written by a long time BBC Asia correspondent, the book projects a very near future (already past for us) conflict among the three nuclear armed nations of Asia—China, India and Pakistan—in 2007. The approach of the book is journalistic and fact based, and geared towards conducting a thought experiment with the author's extensive political knowledge of the region rather than developing full blown characters and believable societies that science fiction generally attempts. The book is a part of Hawksley's future war trilogy—*Dragon Strike* (1997, co-authored with Simon Holberton), *Dragon Fire*, and *The Third World War* (2003)—that extrapolates the present political scenarios of the world to take them to their extreme logical conclusion. These books display very little of the exoticism typical to Western literary discourses on Asia. But, they do show the typical media stances of the West that shifts with the movement of geopolitical power poles.

Dragon Fire depicts Asia as the most volatile region in the present world with three mutually adversarial neighbors armed with nuclear weapons. The conflict in the book begins from long standing disputes between India and Pakistan regarding Kashmir, and India and China regarding Tibet and Arunachal Pradesh that has been fomenting since the 1950s. Pakistan and India have already gone to war three times over Kashmir (1948, 1965 and 1999) and once over Bangladesh (erstwhile East Pakistan, 1971). Pakistan sponsored cross-border terrorism has been the thorn in both countries' attempts at peace. Although not similar, an antagonistic relationship exists between China and India, both countries having fought a war over disputed territories in 1962. Tibet remains a perennial issue of

disagreement, as India granted refuge to the Tibetan spiritual leader, the Dalai Lama, whom China counts as a separatist. On the military front China has also been an ally and supplier of Pakistan.

Dragon Fire depicts a scenario where China and Pakistan attack India to cement territorial control over the Eastern and Western fronts. The three pronged war begins with the disputes over a cross border strike by Tibetan commandos using Indian arms, while Pakistani sponsored terrorists strike in Kashmir. After initial encounters Pakistan uses a nuclear device and Indian retaliation (non-nuclear) completely destroys Pakistani military capability. On the other front, after early gains, China starts to lose ground and the international community led by Britain and the USA, starts providing logistical support to India. Russia warns the Western nations of preemptive strikes, if they attack China, which restrains their participation in the conflict. At this point China goes nuclear and destroys major Indian cities. India responds in the same manner, but China's larger military capability ultimately proves superior. As an aftermath of the war China gains more international influence.

This story line is narrated at a breakneck speed over 361 odd pages and is filled with details of military technology, discussions of world and Asian politics, and different war strategies. In fact, to attest to the authenticity of the information, and by inference the logicity of the extrapolations, Hawksley even provides a "Select Bibliography and Papers" (363) at the end of the book. No doubt this shows the solid research conducted by the author regarding the history, geography and politics of South Asia and East Asia. The journalistic information based stance in the story line too supports such assumption. This book exists on the opposite pole of the Orientalist approach of Jensen and Zelazny. While they exploit myth and religion of India, Hawksley uses real facts. Since Zelazny can only be associated with India metaphorically and through allusion, Hawksley stand in distinction prominently to Jensen. In contrast to Jensen's timeless and eternal India hanging in a geographical vacuum, Hawksley's India is present here and now, and barely in the future. This India is squarely placed on the

map and fights for those dotted lines that mark some areas of its border. In fact, Hawksley's India exists so close to the present that it only just qualifies as science fiction, the solitary "novum" being the nuclear war. The cognitive aspect is so strong here that it almost stifles the estranging quality. Nothing in the novel is radically different from the author's temporal reality—the technologies are not drastically advanced and political situations are almost the same (Pakistan and China under dictatorial rules, while India functions as a democracy). Yet, the premonition of a nuclear holocaust is shocking enough to work as a device of estrangement alongside the temporal dislocation of seven years.

However, such close proximity to reality indicates the shifting Western perspective on India. In *Dragon Fire* as well as in *The Third World War* Hawksley presents India as the beacon of democracy in the developing world, an example to be followed by other underdeveloped nations despite its many flaws. He focuses on India's position in present global politics and economy as a rising player and a new hub of technological progress, not to mention a responsible nuclear power. This is significant from more than one perspective. First, this shows the slow movement away from an Orientalist approach adopted by the West to an approach grounded more in reality. Although an Orientalist approach still lingers, as can be witnessed in McDonald, it has become much more based on social realities. Second, the book also reflects the change in India's position in world politics: from a non-aligned postcolonial nation suffering from internal strife, to a nation able to assert itself at the international level. The novel further indicates India's movement from a Cold War Soviet ally, to a partner of the West, especially of the USA, in the first decade of the twenty-first century.¹⁵⁷ Hawksley

¹⁵⁷ Arundhati Roy picks on this new geopolitical alliance in her indictment of neo-Imperialism in "The New American Century." She says: "Our government's craven willingness to abandon India's proud tradition of being non-aligned, its rush to fight its way to the head of the queue of the Completely Aligned (the fashionable phrase is "natural ally"—India, Israel and the United States are "natural allies"), has given it the leg room to turn into a repressive regime without compromising its legitimacy" (114). The Pakistani dictator in the novel also refers to this alliance in mentioning that the Israelis will deliver any military support to India.

indicates the changing perspective on India's nuclear capabilities too. After the testing of its nuclear weapons India was seen by the West as a nation disrupting regional power balance, and thus was placed under several economic embargoes. However, since then the international community has recognized India as a responsible nuclear nation culminating in the Indo-US and Indo-French nuclear treaties in 2008. These recent events clearly reflect the change of old geopolitical power relations.

Hawksley prophetically predicts such movements in international politics several years in advance. In fact, the predictive quality of the book can be further attested if we consider the terrorist strike on Mumbai in November 2008, which almost sent India and Pakistan to war (only one year off the mark). Probably the biggest stamp of approval that Hawksley received for this prophetic vision was from the then defense minister of India George Fernandes. Gaurav Sawant quotes Fernandes in The Indian Express, "I hope nobody dismisses Humphrey Hawksley's *Dragon Fire* as one more work of fiction. [. . .] What lessons others draw from the scenario etched by Hawksley is their business. But the Indian people would do well to take the blinkers off their eyes and have a full-eyed look at both friends and foes. I commend this book to every Indian" (Sawant). Hawksley returns the praise in his response:

The triggers were the Indian and Pakistani nuclear tests in May 1998. But, because I used to be BBC Bureau Chief in China and looked at it particularly from the Sino-Indian point of view, the comments of George Fernandes on China being the long-term threat crystallised the long-term strategic challenges ahead if there was going to be a long-term peace in Asia. Then if you examine the Sino-Pakistani military relationship, the simmering and unresolved problems over Tibet, and historical enmity between India and China and their natural geo-political rivalry, the scenario of conflict becomes frighteningly real. (Sawant)

Recent diplomatic tension with China over border disputes, Chinese military's border incursions, China's Kashmir policy and Dalai Lama's visit to Arunachal Pradesh, only underscores the authenticity of Hawksley's vision.¹⁵⁸

Despite his close predictive ability, Hawksley however misses the developments in Islamic terrorism in the West. Consequently, he could not imagine something like the 2001 attack on World Trade Center happening, and as its aftermath, the US and British military deployment in Afghanistan and the Middle East. Such presences change the whole equation of military activity in the region. Nevertheless, he rightly predicts the even closer alliance between India and the West in war against terrorism, and designation of Pakistan as a failed state harboring terrorists and bleeding internally to balance itself between its Western benefactors and its Islamic radicals. Hawksley though quickly incorporates these developments in his next novel, *The Third World War*, to show a clear cut divide between "rogue states" (Pakistan and North Korea) and "civilized world" (the US and its allies with India playing a prominent role).¹⁵⁹ Hawksley's perspective in *Dragon Fire* also reveals the British stakes in Asia. He is aware of the sub-continental politics not only because he is a BBC reporter, but also because of the close historical ties of Britain and India. Like McDonald, this history probably makes Hawksley more attuned to the political realities of the Indian subcontinent. This same background also perhaps exudes the British nostalgia of a greater influence in the region. However, Hawksley's well researched book has its own problems when it comes to the depiction of India.

¹⁵⁸ Matters have not been helped by China's veiled media policy. Recently a supposedly "non-state approved" website has published a blueprints of India's dismemberment into smaller countries to further Chinese geopolitical advantage. Although Chinese government has vehemently distanced itself from the anonymous post, it has raised quite a furor in India. However, Ananth Krishna writes in the opinion column of *The Hindu* (a major daily) that this uproar might be a result of India's monolithic perception of China.

¹⁵⁹ Nabanita Sircar quotes Hawksley in *The Hindustan Times*: "The problem is being band-aided over without any real long-term solution being found. This means that Pakistan's cancer will grow until it consumes the whole nation."

Dragon Fire does not suffer from the kind of Orientalism that dogs *Shiva 3000* and *Lord of Light*; neither does it depend on religion and myths to interpret a high-tech future as *River of Gods* does. But, Hawksley's fact based writing ends up only presenting broad political scenarios and no understanding of the social dynamics within the countries. There are few characters in the book that do not correspond to stereotypes—the emotionless hawkish Chinese, overreaching fanatical Pakistanis and confused but ethical Indians. The Chinese foreign minister (from Hong Kong), Jamie Song, comes closest to being a developed character with individual characteristics. The rest are all cardboard figures pushing the actions of the novel. The power hierarchy within the Indian government also reflects a kind of stereotyping: the Prime Minister, Hari Dixit, is a Brahmin male, with all his office holders coming from Hindu upper castes. This may reflect the Hindu Nationalist government led by BJP of the time that Hawksley was writing the book, but it surely is not the only reality of Indian politics. Despite a history of communal violence, caste oppression and the existence of a patriarchal society, India has seen the jobs of President and Prime Minister go to Sikhs, Muslims (even during the Hindu nationalist government) and women; and in the latest election a woman from Dalit caste (low caste), Mayavati, was the Prime Ministerial candidate for the coalition of the Third Front.¹⁶⁰

Again, Hawksley presents the USA and Britain as the countries coming to the aid of India, while Russia holds them off from a Cold War grudge. Russia is still the largest military supplier for India and the longest standing ally of the nation; it is very unlikely of it to take such a neutral stance when it comes to nuclear warfare involving India. This is especially so since the relationship between

¹⁶⁰ The current Indian political scenario is interesting from this perspective with the positions of power being held by persons of both genders and different communities. The Prime Minister, Manmohan Singh, is Sikh; the President is a woman (Pratibha Patil); the leader of the ruling party, Sonia Gandhi, is a woman of Italian and Christian origin; the major opposition BJP and its allies are strong Hindu Nationalists; and the Prime Ministerial candidate from the Third Front (with the backing of the Communists) was Mayavati, a Dalit woman. It should also be noted that the last President, APJ Abdul Kalam was a Muslim elected during the National Democratic Alliance government headed by the Hindu nationalist party BJP.

China and Russia has not always been the best, although over past few decades it has become more stable. No mention of France, the second largest military supplier of India and a long-term strategic ally also expresses the British Francophobia and the idea that the UK-US alliance is the only one of any international significance. This is a long development since the US navy sent in a warship into the Bay of Bengal to intimidate India during the 1971 India-Pakistan war, which was foiled by the Soviet navy's counter pressurization of the US fleet.¹⁶¹

What is important here is to realize that although *Dragon Fire* acknowledges India as a technologically advanced modern nation, it also presents the perspective of the neo-Western ideologues. India being the largest democracy of the world, and a successful one at that, reflects the Western ideals, whereas both China and Pakistan are military totalitarian governments. One is fueled by Islamic extremism, and the other, by Communism. None of these are ideologies that fit the Western bills. This view can be summed up with the US President's comment on the dead Indian Prime Minister regarding Indian nuclear strikes in China: "Hari Dixit refused to go for the civilian targets, didn't he?" (357). This comment is a clear endorsement of the democratic values of India. This is also a perceived notion of the West that it identifies democracies with, and India being a democracy must fit in with it. In other words, Hawksley exports the Western mode of thinking to the non-Western societies just as Jensen does in his novel. His news room clipping style narrative also gives no idea of how any of these societies function, but only provides information about events that happen, which

¹⁶¹ In his article "The U.S. Naval Demonstration in the Bay of Bengal during the 1971 India-Pakistan War" Michael Walter informs that the USA created the Task Force 74 constituting multiple warships specifically for the purpose of showing off its naval strength to India. According to Walter in spite of being advised otherwise US President Richard Nixon chose to support its political ally Pakistan with supply of weapons to safeguard US interest in South-East Asia. Walter also mentions Nixon's personal preference of the Pakistani head of state to the Indian Prime Minister Indira Gandhi for this tilt. However, Indian ally the Soviet Union neutralized this American threat by sending in its navy in the wake of the American warships. Soviet Union also promised to counter any Chinese intervention in the war. Walter says that this demonstration by the two super powers were symbolic rather than real. Neither of them wanted to start a larger conflict. However, this was a political and symbolic failure for the US as it had to pull out its navy without causing any effect on the ongoing war, which its ally Pakistan lost comprehensively.

ultimately compromises the literary quality of the novel. And his analytical skill, which leads to close predictions of future political events, is not really a substitute for imaginative extrapolations and innovative details that are the hall marks of quality science fiction.¹⁶² Hence, even after coming out of the Orientalist discourse on India (also, for that matter on China), *Dragon Fire* remains an out and out Western narrative implementing and buttressing Western points of view.

Thus, we come back to the point from where we started—Gwyneth Jones’s formulation of Western science fiction as a device of projection of its own ideologies onto foreign lands and peoples. Exploration of other lands and other cultures are secondary. Jones acknowledges, in a Saidian vein, that any form of cultural conversation in the colonial/imperial context is undercut by economic concerns of the colonizing country, and is thus embedded in the ideology of dominance.¹⁶³ Science fiction is no different:

In this view of science fiction the *other place* is no longer mere decor, nor yet valuable only as a metaphor for the receptive, the female, the void into which “we” must thrust “ourselves.” It is of vital importance. And the connections between the *other place* of sf and real-world economic empire are redoubled, by the nature of the relationship between world-building fiction and the world from which all fictional worlds are built. Inevitably, the cultures and landscapes annexed in imagination have been largely identical with the cultures and landscapes of those annexed, exploited territories known until recently as the Third World. (2)

¹⁶² The sources for the novel’s praise also indicate this—coming mostly from political figures and economic/political magazines rather than literary reviews.

¹⁶³ Jones says:

We need them [new worlds] because the market stall must have a place to stand. But commercial empire building, as we know, can never be a “purely” economic activity. There must be go-downs lining the jungle rivers, their traffic muddying the virgin waters of local price structure. Native clerks must be trained and thereby alienated from their kin. Soon guilt-tripping missions must be launched to improve the lot of the exploited. Before long we find we’ve had to take over a whole country, in order to keep those wheels a’turning back at home. The tiresome necessity becomes a purpose in itself. Everything is reversed. We came to sell our goods, we end up taking possession of our customers (2)

When the “other place” is literally placed on the formerly colonized lands of the “Third World,” the ideological problems multiply. Such discourses become the continuation of the colonial conversations beyond the past and the present into the future, and, thus, a new mode of ideological domination.

As is evident from our discussion above, Anglo-American science fiction ideologically interpellates India and Indian culture into its own cultural discourse. This ideological appropriation does not necessarily mean a colonial exploitative relationship, but imposition of a mode of understanding typical to the Western perspective onto something evidently non-Western. Sometime such imposition results in blatant exoticism underscoring the Otherness of the Indian landscape (as in Jensen) and sometimes the Indian landscape is used as a device of Othering (as in Zelazny). Despite using the futuristic devices of science fiction, these discourses of Otherness repeatedly go back to the past to imagine the future. When such futuristic discourses are intertwined with efforts to understand and empathize with India (as in McDonald), they still seek the devices of estrangement in the exotic culture of the nation. Even when, the discourses of exoticism are abandoned, India is ultimately placed into the ideologies of Western paradigms (as in Hawksley).

The North American texts of Zelazny and Jensen are outwardly set in distant futures, but in reality are barely concerned with such futures. Zelazny’s text is only a symbolical reconstruction of India on a distant planet in order to engage in discourses of orthodoxy and subversion; and Jensen’s book is only superficially interested in the future, while constructing a regressive landscape through depiction of casteism and superstition. The British texts, however, display a genuine interest in the future of India. While McDonald tries to construct a future where an urban and technological India co-exists with its rural and mystical counterpart, Hawksley tries to foresee India’s place in the future geopolitical power equation of Asia. Still, all these authors end up imposing the Western points of

view. Although Hawksley places India and China at the center of all the actions, everything in *Dragon Fire* is ultimately seen from British and American perspectives and, consequently, interpreted from their geopolitical interests. Similarly, McDonald delves deep into Indian society to extrapolate authentically; yet in *River of Gods* his interlocutors remain Westerners. Even after removing his interlocutors in *Cyberabad Days*, he remains entrenched in rationalizing the exotic and the mysterious. Still, McDonald comes closest to providing a sympathetic and balanced rendering of the Indian future. Such insight is, however, rare not only in science fiction, but in any type of Western discourse about India or the postcolonial world. Lacking such insight and empathy, Anglo-American science fiction in general still remains a part the larger Western discourse of domination that exports and projects its own thought process onto the Others.

CONCLUSION

POSTCOLONIALITY, SCIENCE FICTION AND INDIA

In *The Quest for Postcolonial Utopia*, Ralph Pordzik claims that over the course of the last fifty years utopian writing has progressed from a programmatic Euro-American model to more localized postcolonial and postmodern phase.¹⁶⁴ He argues that such shifts are results, especially in the former colonies, of negotiating the colonial legacy by engaging in a localized heterotopian imagination, which refuses to be confined within one centralized and totalizing paradigm. He also proposes that such heterotopian visions are a result of the failure of a mostly socialistic impetus of newly independent states and the neocolonial impulses of global capitalism. Pordzik's analysis of postcolonial utopia is to a certain degree applicable to our analysis of Anglophone Indian science fiction. The reasons are obvious. First, many of the Anglophone Indian science fiction texts are critical utopian, or as Pordzik prefers, heterotopian; and second, Pordzik often conflates utopian fiction and science fiction in his analysis. However, looking exclusively at the Indian scene, such analysis as Pordzik's only begins to unravel the complex dynamics of socio-cultural forces that inform postcolonial science fiction texts and the impulses operating behind them. These texts not only provide another way of negotiating the stigma of colonization, but reframe the predominantly "here and now" or history-oriented postcolonial discourse of Anglophone Indian literature to a futuristic one. The emergence of these texts also signifies a shift in India's status as a nation on the international stage, as well as in the mind of the

¹⁶⁴ Pordzik says:

Despite these differences—and despite the inevitable distortions that such a progressivist view of genre history produces—it is possible to view a gradual transition in utopian writing from a 'colonial' phase in which the future was usually described through the filter of European perceptions and attitudes, through a post-colonial phase in which writers began to redefine their utopian standards in more localized and transformational terms but often still adhered to realist modes of representations of representation, to the more recent 'postmodern' phase in which writers have self-consciously revised or disrupted those previous patterns, modes and demarcations, and in so doing, have presented radical alternatives both to prevailing literary conventions and to their cultural and political biases. (169)

Indian populace. This change is not only a result of the disillusionment with the socialist goals of the state or of the neocolonial prerogatives of the postcolonial elite; it is also a result of India's shift from a predominantly agrarian country to a modern industrialized nation.

Although science fiction as a genre has been present in India since the nineteenth century and the hectic activity in the field of vernacular science fiction in the wake of the national independence signals the fascination with technology and the future, it is not until the end of the twentieth century that such fascination becomes a confident self projection in the literature aimed at the international community. There are also certain differences between the trends of writing in mid-twentieth century science fiction in indigenous languages and late twentieth century Anglophone science fiction, which highlight the changing pattern of postcolonial discourse itself. The mid century texts (both in English and in indigenous languages) reflect a newly independent country's effort to find footholds in a post war world. The tales of technology or the other worldly adventures are still mostly responses to the Western world and Western literary traditions. They are either efforts to emulate Western standards or subvert them through local conventions. Although abiding by the inclination of cognitive estrangement, these texts are, like their more mimetic counterparts, ways of negotiating the colonial past. They often lack a clear futuristic quality. Furthermore, written mostly in native languages, these texts frequently aim to introduce the population to Western science and thrills of the modern civilization. With certain exceptions, these works are not overtly concerned with postcolonial discourses of nationalism and identity politics.

In contrast, Anglophone Indian science fiction is consciously invested in discourses of postcoloniality, identity and nationhood. Furthermore, Anglophone Indian science fiction also reflects a more mature attitude toward the tropes of technology and the future. Rather than being mere echoes

of the West, such texts create more authentic futuristic and industrialized worlds. These works are not about clever Indian adventurers making fools of Europeans or Indian scientists creating cure-alls from bones and ashes mixed in laboratory, or making robots to startle the neighbors. Rather, these are stories that extrapolate from the Indian present in order to project the country's future, and, in some cases, move beyond the Indo-centric postcolonial discourse to employ a more international vision.

This theoretically invested approach of Anglophone Indian science fiction is evident in its engagement with the dialectic of hybridity and indigenism that informs the debate on national identity. This is not only a tension between the Occident and Orient, but also between the great Vedic tradition and those of less reputable origin. While both Amitav Ghosh's *The Calcutta Chromosome* and Rimi B. Chatterjee's *Signal Red* engage directly in this debate of a pure indigenesness and a mongrel existence, Ruchir Joshi's *The Last Jet-Engine Laugh* takes such amalgamated identity for granted in a high-tech futuristic dystopia. However, all three texts deal with an identifiably Indian future concerned directly with the Indian nation and its inhabitants. This trend, however, shifts more towards a kind of postnationalism in Priya Sarukkai Chabria's *Generation 14* and Vandana Singh's novellas. The future in Sarukkai Chabria's postnationalist novel is less identifiably Indian; rather it is concerned with the bleak future that the whole humanity is moving towards. Nevertheless, in spite of being concerned with a global future, this text is built upon Indian literary traditions and Indian history, as well as Western ideological theories—thus creating a complex matrix of cross-cultural currents. While both Singh's *Of Love and Other Monsters* and *Distances* plainly debate the status of composite identities, these texts are less concerned with immediate Indian politics and move to a more dispersed exploration of postcolonial alienation in a far future context, especially from a diasporic point of view. While Ghosh, Chatterjee and Joshi work with identifiably near futures, Sarukkai Chabria sets her book in the far future; and Singh's works not only concern temporal futurity, but also spatial estrangement to a

different planet and infusion of further alienation through alien beings as protagonists. Nonetheless, beneath all the estrangements these texts are consciously investing themselves in exploring the rising issues of the postcolonial nation and projecting those concerns in a futuristic context. Through their method of cognitive estrangement they are drawing attention to and exploring problems of a postcolonial nation slowly achieving modernity—political hegemony, religious fundamentalism, nationhood, gender oppression, effects of industrialization, myths and superstitions, subalternity, and the concept of knowledge itself.

Writing these works in English also signifies an international target audience, rather than limiting its scope within the domestic sphere. Such an international audience further implies the authors' keenness to project the future of the nation to the international community as well as to present a future which is markedly different from those imagined by Euro-American hegemonic ideology, and, consequently, to challenge Western domination. This desire to uphold a technologically advanced future to the world and the confidence to do so can appear only with real social conditions fostering such imaginative leaps. In other words, the major thrust behind the emergence and consolidation of Anglophone Indian science fiction is the country's rapid industrialization and technological modernization in the last quarter of the twentieth century that have given India a status of a self-sufficient modern nation able to face international challenges and responsibilities.

During the course of the last twenty or thirty years India has slowly moved away from a postcolonial nation still dependent on the benevolence of developed countries to the position of economic and military strength. The opening up of the economy in the 1990s led to India's becoming one of the largest markets for global capital, which in turn created a burgeoning information technology (IT) industry. The Indian system of high quality scientific and technological higher

education produces a large chunk of the minds involved in global research and development. Over the last two decades the Indian space program has advanced at a steady pace, especially in finding inexpensive ways of putting artificial satellites into orbit. In addition to this, India has progressively developed its nuclear power and weapons program, which has made it one of the few nations in the world possessing both civil and military nuclear facilities. The effects of this modernization are evident not only in the international commerce but also in India's rising voice in international politics and at the UN, most prominently in its bid for permanent membership in the UN Security Council. To put it differently, India is at a juncture in its history where the rapid rise in its economic, techno-scientific and political clout has placed it at the standing of international importance. This position calls for looking forward in time and imagining what is yet to come. The daily reality has opened up possibilities to the Indian people that were almost unbelievable a few decades ago. It is a historical moment that demands not a rumination of the past, but a vision for the future. Anglophone Indian science fiction responds to this demand.

This response is very similar to that of Western science fiction during its rapid development a century ago. It is the drive of nineteenth century Industrial Revolution and colonial expansion that molded modern Euro-American science fiction. In *Colonialism and the Emergence of Science Fiction* John Rieder opines:

Colonial invasion is the dark counter-image of technological revolution. In relation to technology, as in other contexts, the history, ideology, and discourses of colonialism dovetail with the crucial, double perspective that runs throughout the genre: on one hand, the wondrous exploration of the new and the marvelous encounter with the strange, but on the other, the post-apocalyptic vision of a world gone disastrously wrong. (33)

By drawing this connection between technological revolution, colonialism and science fiction in the Euro-American context, Rieder plainly indicates the historical moment when industrialization,

economic and military might combine to create a perfect moment for emergence of science fiction in its modern guise.¹⁶⁵ Similar developments can also be seen in post revolution Russia. At a time when under Communist ideology Russia formed USSR and experienced rapid growth of economic, technological, military and political power, science fiction became both a device of projecting futures conforming to the Communist ideology and also of subverting totalitarianism.¹⁶⁶ In all these instances science fiction received a boost from the technological and economic modernization process irrespective of the ideological differences. The genre achieved its technology oriented, futuristic quality only when its generative society showed clear indicators of identifiable modernity.

At the turn of the twenty-first century India is moving through a similar phase of modern industrialization; and a similar need for a new mode of negotiating its identity is promoting the emergence of Anglophone science fiction. Mainstream postcolonial Indian literature has been concerned with the discourse of national identity and challenging of colonial hegemony on both national and international fronts over the past sixty years. However, these texts (which are mostly realistic in their approaches) are concerned either with the present or the past—they decipher the country's and the people's relationship with the colonial past and the independent present. This historical orientation does not mean that these works are confined within the dialectic of British and Indian values. But, rather this attention to the past signifies a historical awareness of Indian

¹⁶⁵ This is a double edged sword. As argued earlier in the dissertation, this historical moment generates two types of responses: an impulse of conformity to the dominant ideology by projecting its further progression, and a subversive tendency that rejects such hegemonic control through radical estranging devices. On the one hand Henry Rider Haggard and Arthur Conan Doyle engage in cartographical exercises and conform to the exotic Otherness of the colonial space in *She* or *The Lost World*. On the other hand Jules Verne's *Twenty Thousand Leagues under the Sea* uses radical estrangement to challenge the authorities of the established colonial powers.

¹⁶⁶ While Zamiatin's *We* rejects Communist social structure, Efremov's *Andromeda Nebula* propagates a Communist utopia.

postcoloniality in the background of the Western imperial powers—old or new—a relationship of center and periphery that arises out of the nation’s past and affects its present.

Such response, though, is very natural in the wake of national independence. In a sense Frederic Jameson is right when in his “Third World Literature in the Era of Multinational Capitalism” he claims that third world texts are national allegories.¹⁶⁷ Although postcolonial scholar Aijaz Ahmad criticizes Jameson’s argument based on his use of the flawed three-world model and citing his tendency towards generalization, we may still see some truth behind Jameson’s statement if we take his construction of third world as the postcolonial world.¹⁶⁸ Any political event of such magnitude as national independence is bound to have a profound effect on the cultural productions of a society, especially if such cultural products are addressed towards the former colonizers.¹⁶⁹ While the obvious nature of this truth gets lost in Jameson’s theoretical generalizations, his critics fail to acknowledge the same in their eagerness in censuring his analytical model. Indian postcolonial literature of the last century has indeed been attempts at narrating the nation—in both theoretical and creative spheres.

¹⁶⁷ Jameson says:

All third-world texts are necessarily, I want to argue, allegorical, and in a very specific way: they are to be read as what I will call *national allegories*, even when, or perhaps I should say, particularly when their forms develop out of predominantly western machineries of representations, such as the novel. [. . .] *the story of the private individual destiny is always an allegory of the embattled situation of the public third-world culture and society*. (1831)

¹⁶⁸ In countering Jameson, Ahmad argues:

By locating capitalism in the first world and socialism in the second, Jameson’s theory freezes and de-historicizes the global space within which struggles between these great motivating forces actually take place. And, by assimilating the enormous heterogeneities and productivities of our life into a single Hegelian metaphor of the master/slave relation, this theory reduces us to an ideal-type. To say that all third-world texts are necessarily this or that is to say, in effect, that any text originating within that social space which is *not* this or that is not a “true” narrative. It is in this sense above all, that the category of “third-world literature” which is the site of this operation, with the “national allegory” as its metatext as well as the mark of its constitution and difference, is, to my mind, epistemologically an impossible category. (105)

¹⁶⁹ Frantz Fanon extends similar argument about national culture in *Wretched of the Earth*, where he sees a predominance of nationalistic feeling in newly independent states. This nationalist phase according to him should make way for a wider internationalism in the future or the country faces the danger of getting mired into a closed bog of provincialism.

From Raja Rao and R.K. Narayan's exploration of the essentially pre-industrial Indian identity in *Kanthapura* and *The Guide* and Jawaharlal Nehru's attempt at establishing the great Indian tradition in *The Discovery of India* to Salman Rushdie's hybridized English and ambivalent protagonists in *Midnight's Children* and *The Satanic Verses* and Jhumpa Lahiri's culture-torn characters in *Interpreter of Maladies*, it has been an exercise in negotiating Indian identity in the new world order—an attempt at understanding India's and Indian people's relationship to Euro-American political hegemony. Understandably such attempts at comprehending India's position as a postcolonial country will lead the authors back to the colonial past, or for diasporic writers in the metropolis (in Europe and America), to the nostalgia of the homeland, ostensibly existing on the periphery of power politics.

Moreover, the use of the English language in Indian postcolonial writing indicates a dialogue between the postcolonial authors and an audience that includes the former colonizers.¹⁷⁰ This linguistic choice also indicates these authors' position on the borderline of Western and Indian cultures, which bestows on them insight into both worlds. Thus, they are better equipped to comment on a nation the culture of which has been mongrelized through centuries of colonization and infusion of myriad foreign elements than the people with less understanding of the Western society, or the Westerners with little understanding of Indian mores. These authors belong to both worlds and to none. By belonging, they become privy to both cultures; through non-belonging, they achieve the critical distance essential for an effective critique. In a sense these authors represent the hybridity of the colonial and postcolonial subjects delineated by Bhabha. By creating a parallel reading space these writers try to negotiate with both the Western and Indian worlds. Such critical potential, however, is mostly directed towards the discourse of the past and the present.

¹⁷⁰ Literatures in the indigenous languages although often deal with the issue of national identity and participate in postcolonial discourses, are often oriented towards matters of less political importance and of more personal, psychological and spiritual significance—or with matters that do not directly render them as allegories of the nation.

Science fictional elements allow postcolonial literature to direct the critical glance to the future of the nation. Science fiction's devices of spatio-temporal disjunction and utopic projections and thought experiments not only allow the authors to explore the future possibilities of the nation, but also to reinterpret the past in the light of the present and the future. Breaking the constraints of historical time with devices of estrangement allows focusing the attention of the postcolonial discourses to the future that the current condition of India so rightly deserve. It is imperative to understand that such a process has already started; only the scholarly establishment has not yet paid due attention to this development.

The discourse on the Indian future, however, is not the exclusive prerogative of Indian writers. The rising importance of India in the international stage has prompted Western authors to speculate about the Indian future. Yet, such Western discourses have their own problems. Although the existence of such futuristic narratives proves India's growing international status as well as acknowledges futures other than Anglo-American, these texts mostly end up reiterating Western points of view and establishing the age old Indian stereotypes in futuristic contexts. Even though these works try to understand the Indian reality and foresee the Indian future, their essential disconnect from the society takes them back to the colonial and Orientalist conversations of the past, and, hence, making them cohorts of the already established Western dialogues on India and undermining the critical potency of the science fiction genre. This is plainly visible in Zelazny's *Lord of Light*, Jensen's *Shiva 3000* or Hawksley's *Dragon Fire*. Even such perceptive works as Ian McDonald's *River of Gods* and *Cyberabad Days* ultimately falls in line with stereotypical themes of religion, spirituality and exoticism. As a result, the Indian future in Western writing remains subject to the same prejudiced vision that characterized Western writing about the Indian past.

In such a scenario the importance of Anglophone Indian science fiction becomes even more prominent. These works at once possess the political imperatives of postcolonial Indian literature and critical estranging apparatuses of science fiction; and being written in English they also have a wide international audience at their command. Moreover, this genre exists at the interstices of Western and Indian cultural and literary values—what I call existence at the center of a double dialectics. Indian science fiction not only straddles the intersection of postcolonial and science fiction studies, it also theorizes the interaction of Western and Indian traditions as well as indigenism and hybridity. These works are as much influenced by Indian epics, Vedic philosophy and folklores as by Western science, Western science fiction, and the English language. Thus, this genre stands at the edge of cultures. While Anglophone Indian science fiction subverts colonial authority by establishing alternative power structures, this genre also rejects uncritical nativism by emphasizing the multicultural history of the Indian subcontinent. The specific generic devices of science fiction enable a synthesis of these clashing tendencies, which projects futures marked by cultural fusion and, often, exhibiting critical and premonitory traits. These futures are combinations of utopic and dystopic qualities. Such futuristic social projections reflect the anxieties of a postcolonial nation moving towards greater mechanization and playing with different socio-political ideologies—from liberal democracy and politics of the subaltern to religious fundamentalism.

Although the texts vary widely in their literary styles, all these projections display a stark disillusionment with unidirectional philosophies—Western or Indian—that refuses to acknowledge existence of other possibilities. Instead these texts advocate socio-cultural acceptance, often through creation of cyborg identities, futuristic multiculturalism, and rejection of totalitarianism. Although these conflicting tendencies are present in varying degrees in all Indian postcolonial literature, they play a crucial role in these science fiction texts in indicating the shift from interpreting the past and

analyzing the present to imagining the future. Furthermore, science fiction can illustrate and elaborate theoretical notions through literalization of metaphors and representation of abstract concepts, making it a genre most suitable for exploration of postcolonial memes.

In an interview with WJT Mitchell, Bhabha says that he is searching for “a form of the dialectic without transcendence” to theorize postcolonial discourse that seeks to create differential space to comment on the state of postcoloniality: “The lesson lies, I think, in learning how to conceptualize “contradiction” or the dialectic as that state of being or thinking that is “neither the one nor the other, but something else besides, Absents,” as I’ve described it in *The Location of Culture*” (Mitchell). Bhabha describes his concept of this differential space as being influenced by Walter Benjamin’s formulation of the problems of late modernity through “disjunctive temporalities of historical ‘event’”:

His work has led me to speculate on differential temporal movements within the process of dialectical thinking and the supplementary or interstitial “conditionality” that opens up alongside the transcendent tendency of dialectical contradiction—I have called this a “third space,” or a “time lag.” To think of these temporalities in the context of historical events has led me to explore notions of causality that are not expressive of the contradiction “itself,” but are contingently effected by it and allow for other translational moves of resistance, and for the establishment of other terms of generality. (Mitchell)

Such a differential construction of interpretative space is enhanced with more acute sense of awareness in science fiction because of its built in affinity to “disjunctive temporalities.” The liminality of Anglophone Indian science fiction as a genre further supplements its reconciliatory tendency that opens up possibilities beyond binary contradictions through “dialectics without transcendence.” Such process is apparent in postcolonial cultural discourse in general, but is much more enhanced in science fiction texts. Science fictional elements lend themselves to explorations of further theoretical premises of power, identity, postcoloniality, and most important of all, futurity.

Irrevocable changes to the social dynamics of India by Western influences demand that the nation's future be imagined through a medium that can synthesize Western and Indian generic and cultural values. This new future is probably best imagined through science fictional tropes that liberate the texts from the constraints of realism and yet provide a logical orientation. The body of Anglophone Indian science fiction performs this task more than adequately. It is time that we pay proper attention to this section of literature, not only because it can articulate the future, can cogitate about the hybrid identity of the postcolonial nation and signify the importance of India's international status, but also because of this genre's proximity to more complex theorization of postcolonial memes. After all, science fiction is essentially an elaborate development of an estranged premise to its logical conclusion.

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1. Permission for reprinting “Alternative Dystopia: Science, Power and Fundamentalism in Rimi Chatterjee’s *Signal Red*” previously published in *Journal of the Fantastic in the Arts* 20.1 (2009), 24-41, from Brian Attebery, the Editor of the journal.

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2. Permission for printing a version of the essay “*The Calcutta Chromosome: A Novel of Silence, Slippage and Subversion*,” forthcoming in the anthology *Science Fiction, Imperialism, and the Third World* (McFarland), edited by Ericka Hoagland and Reema Sarwal as the chapter section “Silent Subversion: Counterscience and Subaltern Discourse in *The Calcutta Chromosome*.”



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VITA

Raised in the university town of Santiniketan, West Bengal, India, Suparno Banerjee comes from a family with artistic and academic heritages. His father is a dramatist and his grandfather was a painter, writer, poet and social activist. His family's involvement in the Indian freedom struggle has inspired Suparno to take a serious interest in the history and literature of resistance. Suparno's wife, Debangana, is also a visual artist and a poet.

Suparno received his Bachelor of Arts in English (Honors) in 2000 and his Master of Arts (English) in 2002 from Visva-Bharati University in Santiniketan. He taught English in a high school in India from 2003 to 2005 and also worked as a freelance writer during the same time for various Indian dailies and magazines. In 2005 Suparno joined Louisiana State University in Baton Rouge to pursue his doctoral degree in English. He is presently a PhD candidate.

Suparno's scholarly interests include postcolonial literature, science fiction, fantasy, literary theory, film and visual arts. His scholarship has been published in the United States and in India in academic journals such as *Journal of the Fantastic in the Arts*, *Literature and Criticism* and *Apperception*. A book chapter by him is forthcoming in the anthology *Science Fiction, Imperialism, and the Third World: Essays in Literature and Film* (McFarland). Suparno will join Texas State University, San Marcos as a faculty member in the English department in fall 2010.