Chapter IV:

A Parametric Study of Anil Menon’s *The Beast with Nine Billion Feet* - A realistic vision of future of science in the social, political and cultural progress of India
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4.1. Introduction

Anil Menon is one of the promising young Indian Science Fiction writers. With his first novel *The Beast with Nine Billion Feet* he has impressed all worldly readers of Science Fiction. Fantasy and realism are the two modes interwoven in the text. The present chapter critically examines Menon’s realistic vision of the future and utilization of basic parameters of Science Fiction.

4.1.1. Anil Menon as a Writer of Science Fiction


4.1.2. A Brief Summary of Menon’s *The Beast with Nine Billion Feet*

The novel begins with Tara who is introduced as a schoolgirl on a Monday and it is also her birthday. Tara is surprised over her favourite English teacher Mrs. Jhunjhunjwala's decision of casting Kave (Kaveri) her classmate, in the role of Juliet instead of Tara for the annual school play. She has an elder brother Adi. Both live with their Aunt Sita because their father Sivan has gone into exile. Sivan used to work
on genetic engineering but for now people thinks he is a terrorist. Tara's House is a technologically advance home. When Tara leaves it, it is controlled by the AI-artificial intelligence. Tara walks in Pune's tekadis. She sees one ugly tree. Tara thinks it is a magnificent example of the Monkey Puzzle tree. Tara meets the twin Ria and Francis on her 13th birthday as gifted friends, new friends. They inform Tara about their mother Mandira who works for Swedish Research Institute. Adi steals the generically engineered vermilion parrot after meeting Bodz. Adi uses Illusion pod of Bondz and visits Lahu to meet the posse. Lahu is a human made island. Posse’s task is to make the shark immune system as simple as possible.

Hafiz advises Adi not to waste his time and talent in playing DNA games. He thinks Vispala will justify his talent. Adi also thinks about leaving the school, getting a nice job and emigrating at the first opportunity. He thinks of Bene Gene project which has no forms, no statements of problems.

Tar learns that her father is due to return home from exile, and is very happy to have her father at home, so is Aunt Sita. The impending of father has changed the life of Tara. Tara thinks of inviting the twins for dinner. But Francis suggests it would be better to meet at a neutral place and they decide on Desert Island. Dessert Island is a classy sort of place. Introduction is made. Mali and his companions force Sivan to come for an urgent meet. When father says he is feeling sleepy it means Ria is involved in this plot of kidnapping Tara’s father. Before setting out to meet Tara and her friends at Desert Island, Siva has tried to talk to Adi. Tara is worried about her brother Adi’s fight with the father, about her friends leaving India. Adi thinks that his father is a destroyer of world. He hates his father. Adi asks Sivan why he leaves the season project and why he closes it even when he is so close to it. Sivan tells he used Adi as his experiment, a genetic experiment. *The Beast with Nine Billion Feet* is set convincingly in India. It addresses some issues currently at the heart of public debate i.e. farmers' rights to traditional knowledge, threatened by multinational seed companies claiming intellectual property rights over genetically modified seeds. It is Pune in the year 2040 and thirteen year old Tara battles for her father Sivan, a brilliant genetic scientist turned activist has been in hiding from the law ever since his campaign against the genetically modified seeds he once helped to create, has caused him to be labeled a terrorist. Tara remains positive, finding comfort in books and her
own sharp wit, and forging a strong bond with Aunt Sita, her ageing guardian and her troubled older sibling.

Seventeen year old Adi is gifted with genetic engineering, despite his dyslexia. Adi selects the peaceful joys of parkour over more social contact, and uses a minimum wage job in an entertainment centre as a face to communicate with his virtual ‘posse’ – a team of skilled scientists, of which he is a valuable member, seeking to push back the frontiers of genetic engineering. Adi strives to get away from the limitations of Pune for the icebound freedom of Nurth, an island near the North Pole where genetic engineering is being promoted, and where he could rise to his true potential.

Adi is also in thrall to his obscure mentor Vispala/ Mandira, a mysterious old woman and an expert genetic scientist who offers him the promise of a better life if he can only finish high school and stay out of trouble until he turns eighteen. Mandira desires to change the world with unlimited use of genetic engineering but finds herself restricted by Sivan’s Dharma Protocols, a set of laws designed to check misuse of genetic modification, possible corruption of natural stock. She is, in spirit the anti-Sivan, aggressively articulating the interests of multinationals seeking to dominate the Indian market for profit, even as Sivan campaigns for open licensing and farmers’ rights to seed stock and intellectual property.

Things change with the abrupt return of Sivan. He restores his status as folk hero by a turn in the political flood. Tara now finds herself tattered between Sivan and Adi. She fails to bridge the gap in their relationship. When Sivan takes away a genetically ‘tweaked’ parrot that Adi has been caring for, he sets in motion a series of events that will reveal unpleasant facts about her beloved father’s past. Adi comes to know the truth about his own origins, and his anger for his father. Meanwhile, Mandira and Sivan battle both for their opposing ideological views and for the control of Adi. It is left to Tara to engineer a salvage.

The book has a great pace and crafted characters. Sivan is much like another Mahatma from history, manages to make a connection with everyone except his own son. Mandira’s stand is as forceful as Sivan’s argument for free life. It is really an important question as to why should humanity not alter with nature if they have the
chance to rise above disease, hunger and even death itself, even if this comes at a huge cost, both monetary and social.

Menon’s vision of a future India brims with tantalizing visions. It is a world of modern technology where it dominates every aspect of life- houses talk to their inhabitants, cars fly, reality reinvents the mundane history lesson. Yet Aunt Sita stays in the old school. Salon makeovers can easily transform you, while gay marriages are legal. Idlis, Madras coffee and Sanskrit rap, the ubiquitous auto rickshaw is popular in a new hi-tech avatar. Menon also visualizes that the dividing line between rich and poor will remain, and the narrow mindedness of religion and politics will remain the same as ever. In fact, Menon shows forcefully that Sivan’s return is made possible only because a right wing Hindu party wins the Lok Sabha polls.

4.2. Science in The Beast with Nine Billion Feet

The effective use of science makes Anil Menon’s work The Beast with Nine Billion Feet praiseworthy. Anil Menon is probably the most significant Indian Science Fiction writer who is contributing to the evolvement of the genre in Indian Literature. The present text is set in 2040 Pune which is highly probable because there is a possibility to witness the scientific and technological changes in the city. It is also possible for people to accept these changes. The story revolves round the concept of genetic engineering and its use in prolongation of life. In this regard Robert Scholes’s opinion on is relevant. He states:

Prolongation of life, another effort to transcend mortality, has two main uses in science fiction. Various ruses have been used to explain the extension of a character’s life so as to land him unchanged in the future: a magic sleep in Washington Irving’s Rip Van Wrinkle (1819) or a preservative gas in Bellamy’s Looking Backward (1888)...The second fictional use for the prolongation of life is already clear in Poe’s The Facts in the Case of M.Valdemar (1845).¹

Apart from genetic engineering Menon also presents development of science and technology in the world depicted in the text.

The book resembles the existing world. For example in the beginning Chitra, Aunt Sita’s friend comes to meet Tara, suggests to her that she should use new
modern molecular cosmetology in which a genomic protein analysis is done and then it is possible to figure out epidermal weakness of body. Chitra informs Tara that with the help of this technology she can turn from Kauva (crow, her nickname) to a queen. It is a racial remark though. Menon may be implicitly suggesting how with the help of development in cosmetology, racism can be erased. Tara thinks that it is the reason why her English teacher, Mrs. Junjhumwalla does not offer her role of Juliet even though she knows each and every line of the play.

Secondly Menon presents Tara’s House as not an ordinary house. It is a technologically advanced home. It is controlled by the AI – Artificial Intelligence. It controls several vital tasks, namely, regulate the thermostat, solar-power generation, security alarms and communications between insiders and visitors. It is called House Brain. The House makes announcements when required. Even it has the software to warn fire brigade, hospital when necessary.

Aditya, a seventeen-year old boy, wonders when he sees a very different bird in a truck which he narrowly misses while playing parkour. Adi has a special visor to identity GPS and read the text. It can link with other informative and communicative devices i.e. home AI or Tara’s cell. It is an advanced version of cell phone. Tara too has her cell which can resemble a credit card. The cell can be morphed to five different shapes. Tara demonstrates to Ria and Francis, the twins, how it can change its shapes to a bracelet, wrist-watch, hand-held fan and a toy sized handbag. With the help of her cell she can link with people, home AI and net-surfing. She admits Adi has a special visor. Adi uses to read with the help of its text recognition software. Adi likes the bird and thinks it is a genetically engineered bird because it can talk and vermillion is not a parrot color. Adi steals it and it leads him into a spot of bother.

Adi works at the Bodz. Adi is asked to do immune shots/ experiments with Godzilla by his new boss Sunnybhai through his ex-boss Yeshwant. Godzilla controls the entertainment and exercise machines- the machines are the supercomputers that run exercise and entertainment machinery including Illusion Pods.

The immune shot is a security thing. Most of the illusion pods are located on the third floor. They are high demand machines. The illusion pod is a standard version of the motion simulators used to train astronauts. The pod consists of an exoskeleton-astronaut-type-suit resting on two Stewart platforms. They could move in any of the
three basic directions- length, width and height as well as pitch. Adi uses this illusion pod to meet his posse at Lahu beach – man made island.

Earlier Adi is supposed to meet them on the island of Lahu because the shark project is over and all posse will be separating. But due to a meeting at Bodz he could not meet the posse. On the contrary he uses Illusion pods to meet his posse at Lahu. He senses he is there. Lahu is 800 miles away human-made island, South-West of the Te Pito o Te Henu, the Navel of the World or Easter Island. He meets the posse which consists of seven-Adi, Balthazar, Charity, Leo, Phuntarick, Prudence and Gnu. All are young scientists working on the immune system of shark. It is a genetic project. The shark project is four years old and it is the fifth biotech venture or project of the posse. But as far as Adi is concerned it is his first biotech genetic engineering shark project and therefore he is very excited about it. As forms of experimental gene-engineered life- synthetic life- the sharks are bound by Dharma Rules, devised many years ago by Adi’s father Sivan. Synthetic life is required to be sterile, traceable at all times via GPS and terminated after use. Vispala is the head of the project. Anil Menon presents Vispala as a biotech scientist, an ambitious scientist, who wants to work on ageing or mortality of life. She strongly believes that man has potential to conquer age. Therefore she restarts the Season Project on an artificial island called Nurth. For this Vispala collects a team of scientists who can complete her project. She is in search of young scientists like the posse. Anil Menon presents the notion of genetic engineering politically in the context of India by referring to Indian farmers’ problems of grains and so on.

Another device Menon presents is a hover Lynx. When Tara meets Mandira and twins Ria and Francis for the first time, Mandira takes them through hover Lynx. It is sky-blue in color. It starts automatically. It is an ultra modern vehicle. It can change its colour. Once Mandira and kids sit in it, it changes from sky-blue to parrot green. Lynx welcomes Mandira. It is a very advanced model. Lynx is an emotional machine. It needs to give positive feedback, otherwise it can be misused.

Mandira informs Tara that Lynx is a piece of the future. When Tara asks about Lynx being a robot, Mandira tells her positively that Lynx is a flying machine. Anil Menon points out how people are using technology not only for communication purpose but also for travelling. The world depicted by Menon in the text is
technologically and scientifically superior to and more standard, than the world. Children have standard technologically superior cell phones. For travelling they have Lynx like machines or houses which save their time and avoid miscommunication. Menon also shows science and technology helping mankind to live life better and luxuriously.

In Chapter four, Adi tries to explain to Yeshwant how he is desperate to meet his posse and visit Lahu, an artificial island. Yeshwant asks about Godzilla shots-the supercomputers are attacked 24/7 by viruses, warms, silicon, prions, spambots, snoops, hackers and so on. In 2040, there is a situation in which the computers are given artificial immune system similar to that of human beings. They could defend their health. The result is to make computer healthier. The inoculation protected the machines against the latest software threats. Yesh scolds Adi for carelessness in Godzilla shots. His new boss also calls for the police DSP Pranay to punish Adi. Anil Menon points out how efficiency of both human beings and supercomputers is based on the immune system. To be powerful, it needs to develop immune system. Adi has inherited the knowledge of molecular biology, genetic engineering from his father. Adi is unaware of Bene Gene project. He thinks it has no forms, no statement of purpose, no recommendations, just biotech problems.

Menon tries to elucidate how some scientific or technologically advanced devices are playing a significant role in the life of characters. Tara, Francis, Ria and Adi are all used to such technology. Tara is surprised over riding on the Lynx and Ria and Francis are delighted to handle Tara’s cell. What surprises Tara is that Ria and Francis are having a unique lens system. In Chapter 5, Strange Friends, Tara comes to know that Ria and Francis have the ability of telepathy. They can copy all the answers of each-other through advance link of their lens. The lenses are not ordinary. They can connect to all sorts of information. Ria informs that the lens can send audio messages as well. There is some sort of ultrasound technology in the lens. The lenses transmit sound to ears. Menon projects such technological change in the field of eye plantation. Vispala also gifts lenses to Adi. Adi then does not need a visor. Through lenses he can even smell the perfume of Vispala. The lenses are basically for the connection and links as Vispala does not want to miss Adi. It is one of the predictions Anil Menon makes regarding the scientific and technological development of the society.
Vispala warns Adi about the parrot thing because she knows in India genetic engineering has laws against it. She promises to take Adi to Nurth an artificial island but migration has some problems. Adi meets Mali in Matheran and comes to know that his father Sivan and Mali worked together on foetuses theory. He informs:

I was studying visual development in foetuses. In foetuses, eyes start to work almost by the end of the first month. What are foetuses trying to see? The answer, of course, is that when they’re in the womb, the nerve connections linking the baby’s eyes to the baby’s brains. ²

This is how Anil Menon keeps every character busy in giving details of science and technological development. Through Mali’s quote, one can easily understand the development of eyesight in a baby before birth. Mali generates interest in Adi regarding genetic engineering. Anil Menon links small incidents in Adi’s life which lead him to understand who he is, what his identity is, and why he hates his father scientifically. Vispala’s interest is different in case of Adi and vice-versa.

On the other hand, Tara is surprised to understand Ria, Francis and Mandira are from Nurth—an artificial island. She notices how in anger Francis swims with amazing and unnatural speed. Ria explains that Sap is the short form of Sapiens. It is a word arrogantly used by the native Nurthi for non-Nurthi people. Ria quotes:

N,U,R,T,H. Nurth. It’s an artificial island. It’s new. Not like India which has existed for a gazillion years, with steaming piles of history everywhere. Nurth has been around for thirty or forty years. Almost everybody on Nurth, everybody over twenty anyway, came from somewhere else; we’re an island of immigrants. But the kids are different. We are born on Nurth. They call us the novae, the new ones. We…New Earth. ³

Ria not only tells about her real identity, but also that she has an alien existence. Tara does not realize that Ria and Francis are genetically engineered Nurth aliens. Ria also informs Mandira / Vispala’s connections in contemporary local grain seed issue. She tells Tara:

It is a matter of politics. Mother’s trying to negotiate an agreement with the Indian government so that the Bene Gene consortium can
market a new seed variety called Pure Grain. These seeds have the potential to develop into almost any grain. It’s not a seed, really. More like a half-machine, half-seed. Seed software. 4

It means one can grow different plants with the same seed in one season. But India has banned such a seed. It is indeed Anil Menon’s credibility to interweave the contemporary issue of politics so smoothly by involving characters and their action and intention. In relation to this, in Chapter 8, The Policeman’s Tale, DSP Pranay informs Adi how his father fought for farmers. He reiterates Sivan’s words:

Most of the villagers were farmers. It’s not great now, but back then it was terrible. A multinational called Mother Earth had a stranglehold on the seed-supply. If you wanted to plant anything—rice, wheat, soybeans, cotton—you had no choice but to purchase it from Mother Earth. We had no choice because our native seeds couldn’t handle the new climate conditions. And the corporation’s policy was to cell us GURT seeds. You have heard about GURT? Genetic Use Restriction Technology? Naturally, it was a time of protest. Sometimes violent, sometimes peaceful. 5

The meeting between Adi’s father and DSP Pranay’s father started with the open-source genetic movement. The seed represents the end of the Mother Earth. Free life has developed alternatives to GURT. It is really a remarkable thing that Anil Menon has presented in the text. It is a contemporary issue of grain that he handles through the open source seed.

Another scientific development is depicted in Tara’s school. It is the Experience Lab. Instead of narrating, explaining or describing the historical events from history books, in the Experience Lab students are exposed to experiencing the historical events actually as historical characters. Menon presents the time capsule phenomenon in Chapter 9. Mrs Walker, the history teacher, instructs students regarding the use of the lab and takes them to experience how the French Revolution begins. Anil Menon projects the change in classroom education due to development in ICT.
Next to it is an automat driverless and fully electric vehicle. It can be used through a credit card. It asks the passenger regarding sitting position, address and so on. It has GPS system set. Tara uses it when Vermillion Party wins the election and celebrates on the roads. She finds it difficult to walk. She does not call an automat but unconsciously her body movements posture the signal to it. Menon projects technological development in transport by providing the details of useful gadgets. When Tara’s father Sivan returns from exile, he too uses visor to read newspaper. Moreover, he is a genetic scientist. He has written eight landmark papers that biologists refer to as ‘The Theory’.

Another interesting thing to be noted is the Roll Tape day of Shirin. She is the kind of character in the novel who loves to record each and every moment of her life in Fly Cams. It is because she wants to download herself into digital media before she dies. She wants to have her virtual self. Shirin seems to be addicted to the use of technology. She wants to record her life. Menon points out how people like Shirin live their life mysteriously in 2040. So it is difficult to judge their emotions or responses as innocent, artificial or real. Anil Menon has presented how technology has conquered our lives and emotions.

When Adi hits Pet shop owner and asks about the biography of the parrot he is surprised to know that the parrot had been designed by a boutique biotech company called Bene Gene. The gene-modified parrot was then sold to a Nigerian outfit, St. Francis Animal Trust, which distributed the animals to pet shops in Europe and Asia. The shop owner also informed Adi that Mali has taken it from him. Adi wondered why Vispala and Mali pretend to know nothing about the bird. Bene Gene affected Adi’s emotions.

Menon presents a technologically advanced photonic mirror. Tara wants to look like Ria to know the mystery and understand why Vispala/ Mandira has kidnapped her father. She knows that both Ria and Francis are in their home. She calls Chitra for makeover. Tara downloads and edits every photograph of Ria. Chitra tells Tara that she can give her color and skin tone of Ria but not the structure. Chitra uses advanced cosmetic technology to change the looks of Tara. Tara looks her face in the Salon’s Nigerian-made ‘photonic mirror’ that could flex surfaces, change resolutions, zoom into specific areas, analyse skin texture, compose poetry and so on. This gadget
is another example of Menon’s projection of evolvement of technology and impact on human life.

In Chapter 17 of *The Beast with Nine Billion Feet* Vispala clearly mentions her desire to take to Nurth. She informs Adi about her new project - the Season Project of immortality. For that she shows him two proofs. One of them is:

Turritopsis Nutricula. The *nutricola* is a species of jellyfish, perhaps the strangest member of a strange class. It was a metazoan-a multicellular animal- that started out as a polyp fixed to the ocean floor, grew in size, detached and then became a free-floating mature jellyfish capable of producing polyps. But remarkably, the *nutricola* grew younger as it aged. The mature jellyfish eventually returned to a polyp stage and started the cycle all over again. It was as if an embryo could be born a baby girl, grow up to be a woman, have children, and at some point, return to being an embryo.Vispala thinks that by doing this she will find a way to extend lifespan by 20 years, then half a century then a few centuries and so on. Vispala plans to make Adi the leader of this project. Her project is called the Season Project. Adi’s father is the second proof. When Tara asks Ria why Mandy wants her father, the Season Project is the answer to her. Vispala or Mandy desperately wants Sivan to complete the Season Project. She doubts Sivan’s sudden declaration of failure of the Season Project. She wants an answer. Vispala is convinced that Sivan knows how to modify the human immune system. He opines that people can control their age through good habits and some luck. It is a time when Vispala and Sivan meet in Boston, at an M.I.T. conference. Vispala’s home is at Imago, an advanced biotech research island. Nurth at that time was under construction. Sivan was a very young scientist professor at M.I.T. Sivan answers Adi that he has used Adi as his experiment, a genetic experiment. He explains:

….in humans in the womb, brain development and immune system have a delicate relationship. For example, the immune proteins produced by Chromosome 6 help grow neural nets in the brain to make sense of what the eyes see. But the relationship is much deeper. We’re human because we think. And we can think because we can
work with symbols. We have language. It turns out, that if we tweak the genes to strengthen immunity for the foetus, that is, if we modify a set of two hundred or so genes found mainly on Chromosome 4 and a few other chromosomes, then the brain loses the ability to process symbols. What’s the use of health, youthfulness and a long life, if you’ve to spend most of that time like an animal? Capable of emotions and feelings:yes. But words, thoughts, a deep consciousness: No. Language and life sit on the opposite ends of a genetic seesaw.

Out of his experiments Aditya was born, but incomplete. He is dyslexic because Sivan is hubris. Father Sivan is worried about the Season Project of Vispala and her intention. Adi goes with Vispala and makes progress in completing her project. Thus the novel reveals how genetic engineering along with the social and political conflicts of it as the central stage in Pune city.

4. 3. The handling of Space and Time in Anil Menon’s *The Beast with Nine Billion Feet*

As it is discussed earlier in Science Fiction there is a scope for writers for space and time warps. Anil Menon in his book *The Beast with Nine Billion Feet* warps time by setting the story in future time 2040. The novel was published in 2009. He sets the story in high-tech Pune city. The book time shifts into the future and keeps readers there most of the time. There are some nostalgic emotions and experiences of characters that lead to the past but within a few minutes all come back to 2040. Anil Menon’s representation of the future technology is possible, probable and believable. In this year in 2040, kids in Pune are depicted as working with liquid computers and illusion pods and travelling in intelligent cars. At first level, one can see the story as relating to social and ethical issues relating to genetic engineering. For example the novel addresses the issues like farmer’s rights to traditional knowledge, their rights are endangered by multinational companies, and companies claim the intellectual property rights over genetically modified seeds.

To begin with, Anil Menon warps time future and narrates what happens in 2040. He introduces the distinct characters who stand opposite in their ideologies in the story. Tara is opposite of her 17 years old brother Aditya and Vispala is opposite
of Tara’s father Sivan who used to work on genetic engineering. Sivan is an expert biologist turned politician. The novelist shifts places and describe events that move the plot with pace. The novel begins with Tara feeling unhappy in the school on Monday and it is also her birthday. After school she goes to her home Shangri-la-Bungalow located on Old Biscuit Road. Anil Menon gives realistic touch in mentioning some places of Pune. In fact he presents a very high-tech Pune city and how places, people and their behavior have an impact of technology in the year of 2040. The mention of Laxmi Road, Appa Balwant Chowk, Pune Tekadies (Hills), and Poona Coffee House is Anil Menon’s conscious attempt to present Pune in a stereotyped order.

Anil Menon uses the Illusion pods for time shift- in the case of Adi’s desperate meeting with the posse. Adi attends the meeting of Bodz. Yeshwant his ex-boss tells him to do immune shots with Godzilla-the supercomputers that run exercise and entertainment machinery including illusion pods. The illusion pod is a standard version of the motion simulators used to train astronauts. Menon in the book states:

> The pod consist of an exoskeleton…The idea was to clamber into the exoskeleton, don the helmet, and have the supercomputers flash synchronized sound and imagery while the platforms simulated motion on various landscapes. It was surprisingly easy to fool the simple-minded human body into thinking it was rambling, revolving, roaming, rolling, rocking, roving, running, rushing- in short, romping in an alter space, alter time. 8

Adi visits the beach of Lahu. Lahu is a human made island, roughly 800 miles South West of Te Pito O Te Henu a, The Navel of the World or Easter Island. It is a time-machine like a device taking Adi to the beach of Lahu. Anil Menon tries to warp time by using this device. Adi senses that he is at Lahu meeting and chatting with the posse. The shark project is four years old and it is posse’ fifth biotech venture. But it is Adi’s first project. Hafiz praises Adi for the kind of work he has done in the shark genome. Adi returns to the real existing world. Though it is a small incident of time and space warp, Anil Menon sees the possibility of it in the year 2040.

The second incident is equally important. It happens in Tara’s class at school. In the Experience Lab, Mrs Walekar, the History teacher, is covering the section on
‘Key Revolutionary Moments and Supplements the course with Experiences - historically accurate- virtual reality simulation of events. Tracking a character is to see and hear an event from the tracked characters’ points of view. For that the school’s supercomputer – 15 years old geozerasthmatically insists on the one-student-one-point-of-view rule. Tara gets Baptiste-one invalids-retired soldier-defending the Bastille. Tara then lowers her visor and begins to track Baptiste’s point of view. Tara almost collapses. All students slowly recover from the events of a brutal July day 250 years ago. Students are curious to know what happened next. Mrs Waleker throws the ball in their hand to imagine what might have happened next. Walekar again goes to May 5th 1789 the meeting of the estates General, 70 days before the fall of Bastille. Walekar explains to students the initial happenings of the French Revolution. This is known as time warping. Though it is a small incident of time warp, Menon gives a touch of Science Fiction in warping time.

Time and space warp happens when Tara gradually comes to know about Nurth and at the end of the novel Adi migrates to Nurth. It is located 160 km inside the Arctic Circle, which is not far from the North Pole. Nurth is short for New Earth. Vispala takes Adi to Nurth mainly for her ambitious aging project on the Season Project. She plans to combine the resource of fourteen labs to focus on longevity. Adi takes his new name Zal after migrating to Nurth. It is at Nurth that Vispala plans to restart the Season Project. Menon very brilliantly shifts places for action. Nurth is an advanced copy.

In case of Vispala’s ambitious project, Menon has certainly projected the possibility of controlling time or ageing. The Season Project reflects this aspect of life. For example in Chapter 17, Vispala explains to Adi that she has two poofs or tools to complete the Season Project. One is ‘Turritopsis Nutricula’ and her second proof is Adi’s father Sivan. Thus the novel highlights the issue of controlling time or aging through the Season Project. By handling this issue, Menon also tries to warp time and space as well. Just like Vispala, Shirin with her Roll Tape Day tries every now and then to capture all the moments of her life because before she dies she wants to download herself into digital Media. She wants to have her virtual self. Thus Anil Menon uses time and space effectively to present how technology affects every aspect of human life.
4.4. The Handling of Characters with Realism in *The Beast with Nine Billion Feet*

It is assumed that characters in Science Friction are intellectually, psychologically, socially and economically far more superior to present human conditions. The writers set their stories in time future and predict some extra qualities in humans so as to depict the impact of existing scientific and technological development.

Anil Menon in his book *The Beast with Nine Billion Feet* appears to be reflecting intellectually advanced characters in the developed Indian society. They are habituated to using technological gadgets like flying car, house AI-Artificial Intelligence, visors for communications, lenses that can sense even perfume, mirror that can zoom in to specific areas and analyze skin texture and compose poetry and so on. Moreover characters are very much real.

Anil Menon set the story in 2040 in Pune and mentions the real places of Pune city. By setting the story in 2040 and presenting technologically habitual characters, Anil Menon takes for granted that human development is possible. While handling the ethical issues about genetic engineering, he uses opposites groups of characters. One group wants to make genetic engineering affordable and that it should be used for public good. The second group believes that such engineering is the future of the world to make humans immortal. The second group also believes that a single seed can be programmed to grow three different kinds of crops. Sivan, scientist-politician, father of Adi and Tara, who was earlier declared by Indian Government a terrorist for promoting ‘Free Life Movement’ in genetics belongs to the first group. Vispala, ambitious genetic scientist, a diplomat from Nurth on a special mission in India, determined to complete the Season Project of immortality, belongs to the second group. This conflict of ideologies also works in the lives of a pair of siblings-Tara and Aditya and Ria and Francis. The relationship between Tara and Adi is disturbed by their choices of living life in relation to genetic engineering.

All characters in the novel tangibly share some innovations of science and technology as a part of their life. For example they use visors that can send and receive information of the world around, genetically engineered eyelids or lenses in
the case of Ria and Francis and Adi that can perform the same function like visors, smart homes and cars that can talk and AI that can praise, illusion pods that can transport a user virtually to another place where he can touch, feel things and interact with others and a history class-an Experience Lab, an Automat-driverless rickshaw. Tara is a very emotional and serious girl. She loves reading and takes her school very seriously. She likes her aunt Sita and her efforts relating to her. Her unhappiness at absence of father is removed when she meets the twins-Ria and Francis and their mother Mandira. She is not happy with her favorite English teacher’s decision of casting Kaveri, her classmate, in the role of Juliet instead of her on grounds of her black color. She is 13 years old and her brother Adi is 17 years old. Tara likes to take her own decision. The entry of twins in her life completely changes her behavior, manner of talking and attitude of life. She enjoys swimming, studying, gossiping, travelling in Lynx with them.

Tara gradually understands the reality about Ria and Francis. Tara avoids arguing with Mandira but enjoys the company of Ria and Francis at school and home. Tara very frankly tells Ria and Francis that her father is far away from her. She does not know where he has gone.

Tara is very conscious about her color and looks. Once she asked his brother Adi whether it is possible to change her skin colour by using genetic engineering. Tara does like to study all languages. She loves languages except Sanskrit. She struggles at her Sanskrit examination. It is mainly because she does not like Iyer sir, her teacher.

Tara avoids discussion about her father but when her father Sivan returns, her life completely changes. She is very happy with her father’s arrival. She is surprised to learn about the link between her friends and her father. Ria and Francis inform Tara that they belong to Nurth—an artificial island. It is a newly made island and people on Nurth are 30 or 40 years old. All have come from somewhere and Nurth is the island of immigrants. But Ria and Francis are born in Nurth. They are called novae—the new ones. Secondly in Chapter 18, The King’s Pawns, Francis explains to Tara his and Ria’s identity of being a transhuman. Ria quotes:

Transhumans think the next step in evolution is to transcend the limitations of the human body. Limitation of our senses, our thinking,
our structure, everything. And we rely on technology to show us the way. Remember we told you we have lens-links. 9

The fact that Ria and Francis are Nurth or transhuman suits the general characterization in Science Fiction. Anil Menon presents the twins Ria and Francis as transhuman figures. Tara notices how Ria does not have navel and how Francis swims with unnatural speed. These are enough proofs for her to know that Ria and Francis are transhumans. Infact the Science Fiction writer always tries to produce characters who are not bound by human limitations. The writer is busy in presenting how limitless, boundless, gifted, some characters are. Their abilities could be recognized as the hidden desires of human beings. Thus Anil Menon not only presents opposite characters or siblings but also the opposition of humans and transhumans. From the point of characterizations Ria and Francis are credible characters though they are transhuman or born in Nurth or the new ones. At the end of the novel they desire to stay with Tara and Sivan and reject going with their mother Vispala/Mandira. That makes them credible and human.

It is witnessed that all siblings do not share the same moral values and ideologies of life. Tara and Adi are different. Both live in Pune, a high tech city. Adi is a very average student in school, but convinced that formal education is a waste of time. He is proud of his own abilities as a biologist, and his genetic engineering skills. He realizes this skill when he meets in virtual space with Vispala and her high powered genetically-engineered team of posse. Then he decides to live in a world which can appreciate his talent of a biologist. In the first chapter one can notice Adi’s desire to leave Pune and become a part of Vispala’s world. When Bodz fires him, he sees it as an opportunity, not as a setback. Adi realizes at the end of the novel that he and his talent are like that of a pawn. He is Vipala’s pawn. Tara on the contrary acts independently. Though Tara is younger than Adi, she desires and acts to solve some mysteries that surround her. She wants to save her family and friends. For that she uses makeover. She is a down-to-earth character whereas Adi lives in his dreams. Adi and Tara thus share different ideologies of life. Like Adi and Tara, Vispala and Sivan belong to different poles or ideologies. One promotes genetic engineering as the future of the world and the other promotes Free Life Movement in genetics.
The researcher strongly claims that Anil Menon handles the characters with a sense of realism. One does not find aliens but transhumans in the form of Ria and Francis but they share and like human qualities. In fact Ria and Francis fight to be counted as ‘humans’.

4.5. Narrative Technique benefits in Minimizing the distance between setting and events in *The Beast with Nine Billion Feet*.

*The Beast with Nine Billion Feet* tells a story in which all characters are involved separately in the ideological conflict based on genetic engineering. The narrator presents the third person point of view. But he alternates while telling Tara’s and Adi’s points of view. Both Tara and Adi are constant in their respective ideologies of life. Both are presented as ‘opposites’ by the narrator in the story. Moreover it is not only conflict of ideologies that Anil Menon is concerned with, but two opposite poles of adults. One pole of the conflict is Vispala/Mandira, mother of Ria and Francis, and the other pole of conflict is Sivan, father of Tara and Aditya. Anil Menon does succeed in staging the ideological debate in the narrative which appears more tangible even as the story takes place in time future 2040 A.D. in Pune. A majority of events happen in Pune. Cross reference to Matheran, Mumbai-Pune expressway, Appa Balvant Chawk, Shaniwarwada are all familiar to most Indians. The book is set just 30 years away, a future one can easily imagine and touch. All characters in the book are normal human beings, except Ria and Francis and all events that are depicted in the text appear to be real and normal. The fascinating aspect about the narration is that the narrator shifts time into future and keeps there most of the time. The high-tech Pune in the form of flying cars, houses talk to their inhabitants, salon makeover can transform ability, high tech auto-rickshaw, visors that give information of the world around, genetically engineered lens, cars with Artificial Intelligence, illusion pods that can transport a person from one place and time to another, and Experience Lab classes appear to be real when Pune in 2040 is imagined.

To begin with Shangri-la-Bungalow Housing Society is a place where Aditya – 17 years old, Tara – 13 years old, live with their Aunt Sita. Tara is not happy with her English teacher’s decision of not casting her in the role of Juliet, due to her dark complexion, though she knows all the dialogues from the text. Moreover her aunt’s friend Chitra insults her by calling her Kauva (crow). Tara goes for a walk late in the
evening. She reaches Pune’s tekdis- the deserted woodland type of place. She sees an ugly tree. Tara thinks it is Monkey Puzzles tree. There she meets Ria and Francis her friends. A majority of events happen in Pune. But Lahu and Nurth cannot be neglected in the shaping of the story when Adi using Illusion pods, visits Lahu to meet his posse, the narrator narrates events of Lahu beach. Lahu is a human made island, 800 miles South West of the earth. Though the narrator shifts from one place to another, his shifting appears to be real in 2040. Similarly the narrator narrates the incidents from Lahu and NURTH. The last Chapter, ZAL, takes readers to the NURTHI people. Adi sees a dream:

…the Beast With Nine-Billion eyes and nine-billion hearts. Nine-billion feet moved it across the mud-scarred field, and nine-billion throats sang like whales as it moved. Its face was a wildness of nine-billion faces. 10

Tara comes to know about Nurth through Ria and Francis. Nurth is an artificial island of immigrants. They are there for supporting and developing projects of genetic engineering. Vispala heads the Season Projects of longevity. The narrator remarkably presents the details of human life both at Pune and Nurth and how the human life is largely affected by well developed science and technology. The most impressive aspect about narrative technique is that the narrator asks some questions suggesting improbable possibilities. For example it is difficult to answer if Vispala/ Mandira is a friend or enemy, why Francis and Ria are like the night sky, where is Francis and Ria’s father, is Sivan a genius or a terrorist, and most importantly what the beast exactly is. Anil Menon proves that the best Science Fiction is original and interesting and can be produced in India as in other corners of the world. The narrator seems to enjoy giving the details of its content, events, shifting of places and atmospheric world-building. The representation of events, future technology, is believable. Because the text is open ended, the narrator shows the possibility of its sequel which may be more perfect than this. The end of the novel does promise its sequel.

While narrating the ideological struggle or conflict of opposite characters, the narrator maintains a balance while tracing the development of characters. He presents the images of the bonsai to communicate conflict of ideology. For example on the one side Vispala refers to the bonsai as Mali’s students. Mali, too, thinks ‘bonsai gardener
is a teacher’ and says ‘Adi, my man, the brain is just a tree growing inside your head’\textsuperscript{11}. On the other side Sivan says to Tara:

You’ve seen bonsai trees, no?....In a way, that’s what we do with millions of humans. If humans are given decent human nutrition, a good education, some love, pushy parents and high expectation, they generally bloom, flourish and reach their full potential. But take away resources, take a person’s freedom, keep them in ignorance, bind them with superstition and fear, convince them of their inferiority, then you’ve created a bonsai person. Incomplete, stunted, denied even the capacity of hope….\textsuperscript{12}

Thus, the narrator distributes himself equally between Vispala and Sivan’s perspectives as well as Aditya’s and Tara’s perspectives. The narrator presents Aditya as a pawn and others as independent as long as their action does not conflict each other’s interest. This is how the narrative technique benefits in minimizing the distance between setting and events. Both the setting and the events in the novel appear real and possible.

4.6. The Presence of Epical Pattern, Element of Suspense, Grandeur and Impossible probabilities in Anil Menon’s \textit{The Beast with Nine Billion Feet}

As in the epic form, the subject of the text is lofty or grand Anil Menon presents the subject of genetic engineering in two ideological terms. He presents opposite characters projecting contrary views or ideas as it is in the epic. One group wants to make genetic engineering affordable and believes it should be used for public good. The other group believes that such kind of engineering is the future of the world. Menon handles this subject by setting the story in 2040. Pune and by visualizing biological, technological and scientific evolvement in that era. The siblings, Tara and Aditya, belong to opposite ideologies relating to the social and ethical issues about genetic engineering. Vispal and Sivan also belong to opposite ideologies. The greatest thing about the book is that Anil Menon does not tell readers which ideology is good to accept and which one is bad to reject. Infact he wants readers to decide it for themselves. The text does not take sides with any one
particular ideology. Vispala wants to restart the Season Project which Sivan had left with his son Adi who had inherited the skill of genetic engineering from his father. Vispala uses Adi as her pawn to achieve her ambition.

The second element is an adventure. In Science Fiction an adventure consists in voyages or visits to the moon, planets or stars. It is also a visit to an infinitely large or small future. Anil Menon in this regard sets the story in near future i.e. 2040, Pune. Though the text does not deal directly with time travel device but illusion pods are being used to travel from Bodz, Adi’s work place, to Lahu, human made island that is nearly 800 miles away. Adi meets his posse - Leo, Balthazar, Charity Phun, Prudence and Gnu. Vispala arranges their Lahu project which is to test the shark’s immune system. All sharks are implanted GPS to make sure they do not move from a fixed area. Adi watches a shark approaching towards Leo. He realizes that Leo is in trouble. Adi saves Leo, but another shark attacks Adi. He somehow escapes his head from the attack. Though it is a small episode of an adventure it is organized to test Adi’s skill in genetic engineering. Another small episode of adventure lies in the Experience Lab, known as the class of history. It is a modern high tech lab of experience in which students are exposed to experience historically accurate-virtual reality simulation of events. It is tracking a character and to see and hear an event from that person’s point of view. Tara gets Baptiste, an invalid-retired soldier defending Bastille. Ria gets Comrade Isabeau Tourney-a woman. Students enjoy the activities of history class. Tara and Adi show adventure in their respective decisions and actions. For example, Adi steals a genetically engineered parrot and goes against his father to an extreme level in order to save him. He beats the smuggler. He identifies the parrot. He decides to go to Nurth, an artificial island, with Vispala and to help her in her ambitious the Season Project. He changes his name and identity and calls himself Zal, a master biologist and leader of the Season Project. Tara, on the other hand, decides to makeover to understand why Vispala has kidnapped her father. She wants to get an answer and tries to save her brother and father from Vispala’s trap. But the real adventure lies in the conflict in the plot, in which some characters gain something and lose something very valuable.

Both in the epic and Science Fiction the setting should be universal and metaphoric. In Beast with Nine Billion Feet the setting is Pune, partly Lahu and partly Nurth. Lahu is a man-made island, whereas Nurth is an artificial island. The writer
has set the story in 2040 and imagines some changes to Pune city which appear to be real. Pune is certainly a great hub of technology and is know for the smart city of the future. The future depicted in the novel is palpable and real.

Suspense is observed in the denouement of the plot. Anil Menon tries to present the action of characters in their involvement in conflicts. Both physical and psychological conflicts of Tara and Adi lead them to exist on their own. Suspense is present both in the sibling’s actions and choices of life.

Anil Menon’s improbable possibilities can be listed as follows:

1. Visors that communicate
2. Cell that can take 5 different shapes
3. Lynx- flying car and AI in it talks
4. Photonic mirror
5. Lenses genetically engineered nitrating eyelids
6. Experience lab history class set
7. Illusion pods transport a user virtually to another place
8. Home AI that can talk
9. Genetic Engineering Aging and Longevity/ bird that can talk
10. Makeover salon
11. Roll-tape day
12. Driverless automat-rickshaw

The important thing about the aforesaid improbable possibilities is that they appear to be real when we consider that the world that exists in the text belongs to the form of mundane Science Fiction.

4.7. Writer’s Attitude to Science and the Genre Science Fiction

There are many Indian writers writing Science Fiction in English. Before the publication of The Beast with Nine Billion Feet, in an interview ‘In search of Indian Science Fiction: A Conversation with Anil Menon’ (October 7th 2008) Vandana Singh asks Anil Menon a list of questions: “What are the things that drive Indian Science Fiction? What are its themes and concerns? Where does it resemble or differ from the Science Fiction tradition of the west?” Vandana Singh pinpoints merits of Anil Menon’s Science Fiction. The summary of her observation is:
What I Love about Anil Menon’s stories is the density of their ideas, the often breathtaking use of language, and an emotional depth that is rare in Science Fiction, especially in Science Fiction by Indian. 13

Anil Menon is very optimistic about Indian Science Fiction and its emergence. He believes that Indian Science Fiction seems to have come out of the native experience with the inscrutable British Experience. Anil Menon predicts the good future for both Indian Science Fiction and writers. In his book *The Beast with Nine Billion Feet*, he predicts a series of high-tech devices or ideas that are possibly the future of the world. For example a high-tech house is being controlled by the AI-Artificial intelligence. It controls several vital tasks; namely, regulate the thermostat, solar-power generation, security alarms and communications in the form of announcements. Secondly, Illusion pod is the motion simulators taking its user virtually to another place where the user can interact with others. Third is the high-tech flying-car Lynx which has inbuilt AI in it. AI likes to be praised for the good functioning. Fourthly, Menon predicts the smart cell phone which can be morphed to five different shapes from bracelet, wrist-watch, hand held fan and toy sized hand bag. It can link to AI and the nets. Adi’s visor is more advanced than Tara’s cell which has the text-recognition function and can have access of information of the world around. Fifth is the lens or eyelids that can communicate, share information and sense the perfume. Sixth is the Experience Lab of history class, in which students can experience-historically accurate virtual reality simulation of events. Tracking a character is to see and hear an event from that person’s point of view. Seventh is makeover salon that can transform your colour and skin tone. Eighth is photonic mirror that could flex surfaces, change resolutions, zoom into specific areas, analyze skin texture, and compose poetry and so on. Nineth is driverless auto-rickshaw. Anil Menon visualizes the change in the transport facility of Pune in 2040. He strongly believes that there will be driverless automats. By using credit card one can travel or use a high-tech electric driverless rickshaw. The most important prediction is of genetically engineered people, birds or animals Anil Menon makes in this book. Mandar Talvekar registers his observations in a review of this text:

*The Beast With Nine Billion Feet* belongs to a sub-genre in Science Fiction called mundane Science Fiction- like most SF books this is set
in the future but not centuries away. The novel is set in a world 30 years from now—a future that is almost tangible.14

(Review first published on his blog and later in Indian SF: Science Fiction and Fantasy Stories in Jan Feb 2013 issue # 1)

Anil Menon’s vision of future India is interlinked with contemporary political issues. Menon shows how technology dominates every aspect of life. He has presented two different ideologies of genetic engineering with its differences in ideology which are interwoven into relationships between the father and the son, the brother and the sister. Adi is shown as a confident boy in his own brilliance as a biologist. He can’t read but he is an expert genetic engineer or designer. He is being loved and respected by his posse-high powered biotech team or group. Tara is opposite of Adi. She loves reading books and attending a school. She likes to maintain relationships. The writer depicts the struggle between Sivan and Vispala in ideological terms. But at the same time in the book he does not make it clear which ideology is right and acceptable. He allows readers to judge for themselves whether Vispala is right in promoting genetic engorging for the future of the world or Sivan in deciding that genetic engineering should be used in favor of farmers. The author very skillfully links the major social, ethical and global issues that have been tackfully projected through the clash for control of minds and powers.

Anil Menon thinks that there is plenty of opportunity to predict the future as far as Indian Science Fiction is concerned. While handling both science and the genre Science Fiction, Anil Menon visualises future life in the real physical world which gives the book tantalizing effects. The book is set in 2040 that predicts the future after two decades. The novel is a mundane Science Fiction genre in which Menon forecasts that scientific and technological development is likely possible in 2040. Menon’s other books such as Harris on the Pig and Love in a Hot Climate also talk about future imaginations. So it is certainly Anil Menon’s ability to visualize a future which holds the key to his success. The writer does not fail in anticipating the changes in human relationships due to technology. It can be easily witnessed in case of Adi’s relationship with his family members. For the sake of emigration or doing what he likes, he sacrifices his family relationships. He selects Vispala’s path for the future. Emigration is the desired option of Indian scientists and technicians. This aspect has
been presented through Adi. At the same time the author shows that gain is always associated with loss and there is interdependency of science and human life. Anil Menon maintains the balance between science and the characteristics of a literary work. By explaining science or the scientific aspect in the text Anil Menon does not allow his narrator to divert from the main conflict. There is a pace that moves the story effectively. Though the end is mixed, it seems that the writer is thinking of writing its sequel. He proves critics and readers wrong by setting his science fiction in a country like India. It is really fascinating to see the year 2040 in Pune where kids are busy in liquid computers, illusion pods, travelling in intelligent cars or self-automat (driverless). He indicates that it is time to handle the human mind in the laboratory and it is the need of the time by setting the Experience Lab of history class which will enable children to comprehend the past, the present and the future world of high-tech. Thus Anil Menon clearly sees Science Fiction as a form of opportunities to visualize the future and he certainly succeeds in projecting likely developments in the field of science and its impact on human relations.


Science, basically, works for the betterment of humanity in providing innovative things to lessen the labor of human beings. Science basically shapes the future of mankind. One cannot deny the fact that today’s science is for the betterment of tomorrow. Therefore scientists work very hard to complete their projects that make human life better and the Earth a better place to live. Science Fiction contributes in anticipating changes in Science and technology. It also projects that human relationships are bound to be affected under such changes in the logical sense of reasoning. Anil Menon, from the point of view of Indian Science Fiction writer, believes that there are 80 odd predictions that have come true with the passage of time. He sees a wonderful opportunity for Indian Science Fiction writers to predict and shape the world of the future. Anil Menon sets his novel *The Beast with Nine Billion Feet* in the near future 2040, Pune and predicts some likely changes in the field of science, its use in the present and the future of human life. Digital and communication technology is ruling the world. Many smart devices have come into use. As long as cell is concerned, the writer presents Tara’s cell which can be morphed into five different shapes. It is the modern device of telecommunication. But it is also for finding links, links with home AI and relatives’ whereabouts. Adi’s visor
also has the same functions. But his device can recognize handwritten text as it has text recognition software. Chitra mentions how one can change skin structure or colour by using developed cosmetics. Tara does change her skin structure to visit her friends Ria and Francis’ house to find her father. In the early part of the novel Chitra tells Tara to use new modern Molecular Cosmetology through which a genomic protein analysis is possible to figure out epidermal weakness. Chitra at the end of the novel uses the same and changes her colour and the skin tone. In this way the author finds it pleasing to juxtapose science and its use in the present and the future. Another thing is an automat: a driverless and fully electric vehicle. It asks so many things to passengers such as seating position and address. The passengers have to use cash-card for travelling in it. It is one of the practical predictions the author makes in the novel. Tara travels in it twice, once when Vermillion Party wins the election and second when she wants to visit Ria’s home to find where her father and brother are. Another important technological device is the AI- Artificial Intelligence in home. It controls several vital tasks; namely, regulate the thermostat, solar-power generation, security alarms and communications. It is called as House Brain. This can be experienced in modern technologically advanced homes in the existing world as well. Anil Menon presents how people are used to such devices so as to make them familiar things of their life. They are projected and presented in such a manner that the characters do not find strangeness in handling them in day to day life. Monideepa Sahu, in her article *Windows and Aisles*, Dec, 2009 Issue, Paramount Airways Inflight Magazine, mentions:

> Kids in Pune, India are working with liquid computers and illusion pods and travelling in intelligent cars. Perfect pimple-free skin can be had by applying the right creams. It is a brave new world of difficult questions and endless possibilities. A world peopled with humans, and transhumans who are more than human.  

The interesting thing about Sahu’s view is her belief in possibilities of existence of transhumans on the assumption that humans are eager to cross all sorts of limitations in future. To make this happen will largely depend on technology. Ria and Francis have a lens that can communicate information digitally. They call such a lens contact lens. They can connect to all sorts of information. Their mother Vispala/ Mandira can have access to these lens. Vispala gives a similar lens to Adi as well. It is mainly
because she does not want to miss Adi and it will be easier for her to track his location. Lens can recognize smell sense as in the case with Adi. Anil Menon thus visualizes such a lens that can have access to information and which can recognize the smell of people. It could be the future advance of technology in India and all over the world.

Genetic engineering has been handled as one of the most important issues. The writer puts the ideological conflict on the material consequences of biotechnology in bitter opposition. The struggle between Vispala and Sivan is stated in terms of local politics of Pune. It is the Mother Earth, the Pure Grain politics of farmers.

A multinational called Mother Earth had a stranglehold on the seed-supply. If you wanted to plant anything- rice, wheat, soybean, cotton you had to purchase from Mother Earth. We had no choice because our native seeds couldn’t handle the new climate conditions. And the corporation’s policy was to sell us GURT seeds. You’ve heard about GURT? Genetic Use Restriction Technology? Naturally, it was a time to protest. Sometimes violent. Sometimes peaceful. 16

DSP Pranay explains this political angle of Sivan’s involvement with Adi and how Sivan then becomes the political figure-Sivanbahu. Vispala, the rival of Sivan, is an ambitious biologist and diplomat. She tends to transform the world with unrestricted use of genetic engineering. He believes science and technology can be used in making transhumans of humans who will love to have more options for everything. What modern science and technology is partly doing is transcending the limitations of the human body “limitations of our senses, our thinking, our structure, everything”. 17 Thus Anil Menon projects life of humans in which science can be used both in the present and the future to erase the limitations of human body, human thinking, human senses and human structure by deploying various technological devices in The Beast with Nine Billion Feet.

4.9. Interface between Science and Fiction

In terms of function, purpose and characteristics both science and fiction appear similar. Though writers of fiction and scientists work for the betterment of society, both have different ways and sources to mark their presence. Writers
theoretically try to build society and scientists practically try to build society. But both aim at developing life of human beings by handling the environment in which they live. This can be observed in case of Anil Menon and his work *The Beast with Nine Billion Feet*. The very first element of similarity between science and fiction is a speculation or a prediction or a vision that leads to anticipate some positive or better changes in the existing world. Science Fiction anticipates change in technology and science and its impact on human life and relationships. The author stresses this fact in presenting two opposite groups of characters who share different ideologies of genetic engineering. He visualizes or projects technology as a superior form as long as communication is concerned. There are visors, eyelids and cell phones in advanced forms that they can communicate and link to AI. Tara has a cell that can be morphed to five different shapes and can link to home AI. Menon projects a home with Artificial Intelligence that can control even thermostat, solar-power generation, security alarms and communication. It is called House Brain. Menon also projects a flying car-Lynx. Some characters are deeply habituated to technology. For instance Adi loves being a part of Bodz, spends time in using illusion technology. He loves posse- a team of high-powered bio-technology experimenting with immune system of shark at Lahu Island. Bodz is a place where immune shots are done with Godzilla-the machines are the supercomputers. The writer also sees illusion pods which can transport user virtually to another place which can come into play in the future. Lens is technologically built. It is advanced lens that can share information, understand or sense the perfume which could be an undeniable possibility in the future. Makeover salon can transform skin colour and tone as in the case of Tara. The most important visionary aspect is the Season Project, ageing controlled project of Vispala which she aims to restart with the help of Adi. Vispala’s ambition to control age is the dying wish of humanity no matter its consequences. The author tries to suggest that relationships get deeply hurt by this ideology. Adi does not feel familiarity with his father Sivan. He takes the decision to go with Vispala in restarting the project. Thus the novelist visualizes how some family relationships suffer, how some gain and loss something in the technologically advanced world of genetic engineering. Anil Menon places conflict between the two opposing ideologies at the centre of the novel to show the material consequences of biotechnology. All characters are habituated to use advanced technology.
The second element of similarity between science and fiction is truth, related to knowledge. Vispala and Adi are partly unrealistic and highly ambitious about their Season Project. Aditya makes it very clear to himself regarding his migration to NURTH. Fired from job at Bodz, he sees it as an opportunity than a setback and joins Vispala’s project of aging. Vispala claims that Sivan knows the way to control aging. Sivan remarks regarding immortality:

No it’s fantasy. There are no such modifications. Simple creatures have genetic tweaks to regulate the aging process. Flies and earthworms, cockroaches and slugs. But we are not simple. Mortality is not just genetics, it’s also the signature of the world upon us. There is no protection against mortality, dear one. You’ve let fantasy take over your reality. You’re riding a nightmare. Awake. Unmount.  

Sivan also tries to convince Vispala that death is always associated with life. Man has no option. Adi interrogates his father about closing the Season Project when he was so close to it. Sivan tells the truth that he and his wife Usha used Adi as an experiment for the ageing project and it is mainly for getting an answer. He elaborates:

In humans, in the womb, brain development and the immune system have a delicate relationship. For example, the immune proteins produced by Chromosome 6 help grow neural nets in the brain to make sense of what the eyes see. But the relationship is much deeper. We’re humans because we think. And we can think because we can work with symbols. We have language. It turns out, that if we tweak the genes to strengthen immunity for the foetus, that is, if we modify a set of two hundred or so genes found mainly on Chromosome 4 and a few other chromosomes, then the brain loses the ability to process symbols. What’s the use of health, youthfulness and a long life, if you’ve to spend most of the time like an animal? Capable of emotions and feelings: yes. But words, thoughts, a deep consciousness: No. Language and life sit on opposite ends of a genetic seesaw.  

Thus Anil Menon brings out the difference of opinion in using ideology of scientists believe in genetic engineering for control and power over the future of the world and the other group wants it to be used in favor of humanity.
Turning to the third element present, both in science and fiction, is adventure. Science and fiction closely deal with handling the element of adventure. For example, scientists perform adventurous feats with enormous efforts to arrive at a result. Writers show that adventurous life is a very important part of human life. It makes man active. In Science Fiction adventure lies in travelling from one place to another with the help of time machine device. Menon in his book *The Beast with Nine Billion Feet* puts illusion pods to show the element of adventure. Adi is given a task to give immune shots to Godzilla at the Bodz. Godzilla is that machine, the super computer that runs the exercise and entertainment machinery including Illusion pods. Adi is desperate to attend his last meeting with posse at Lahu Island, because the shark project is over and all are going to separate. Adi is excited to be a part of the group working on the shark project. He uses Illusion pods and goes to meet the posse at Lahu islands, roughly 800 miles at Easter Island. He senses to be there and meets Leo first. Both Adi and Leo search for Adi’s shark beneath water. All the modified sharks have GPS-controlled implants to make sure they do not move away from a fixed area. Adi sees the shark is turning towards Leo. Adi saves Leo from its attack and merely misses his own head. Then Adi shatters the sharks into 1000 pieces. Though it is a small incident of adventure, Adi’s skill in genetic engineering, shark genome Giacometti on the immune system, is very original and accepted by all. Another incident which interfaces science and fiction is high tech Experience Lab of history class of Tara. In it a student can experience historically accurate virtual reality simulation of events by tracking historical characters. Tracking a character is to see and hear an event from that person’s point of view. For that the school’s supercomputer, asthmatically insists on one-student-one-point-of-view rule. Tara gets Baptiste, one invalides, a retired soldier defending the Bastille. Ria gets comrade Isabeau Tourney-a woman. Lynx device is a flying car that takes passengers to their destinations and it needs praise from the passengers for doing its function properly with AI in it. Thus the illusion pods, Experience Lab, Lynx are devices Menon prove the admixture of science and fiction. Tara battling to find the reason why Vispala kidnapped her father and therefore she makes over with modern cosmetic technology to look like Ria with the help of her Aunt Sita’s friend Chitra. This is an interesting interface of science and fiction.
Writers of fiction create characters with intention. Similarly in science scientists have intentions in their action. Both writers and scientists work for the betterment of humanity. Fictional characters represent human beings and their common feelings like greed, truth, revenge, anger, love, gratitude, affection, hatred. Anil Menon presents opposite characters to share opposite views and feelings. One group of characters consists of Vispala, Mali, Hafiz and Aditya. This group thinks that genetics engineering is the future of the world. It works for the Season Project. The second group of characters consists of Sivan, Tara, DSP Pranay, Ria and Francis. This group thinks genetic engineering should be used in aid of farmers and poor people. Vispala’s group aims at becoming transhuman so that humans will have more options regarding their senses, body structure, and mortality. Thus the author presents interface of science and fiction by presenting characters tangibly in their action and intention. He also presents how logic (science) and imagination (fiction) go together in shaping human life in the world of science and technology. Menon tries to state the ideal condition for people with their action and intention which indicates the basic function of both science and fiction. Thus there is an interface between science and fiction.

4.10. Balance of Romance and Realism

Though romance and realism appear very opposites, Science Fiction writers keep the balance between the two while handling the genre. H.G. Wells was the master of balancing romance and realism in his Scientific Romances. The Indian Science Fiction writer Anil Menon also balances the element of romance and realism in his work The Beast with Nine Billion Feet. The text deals with the issue of genetic engineering. The author presents opposite ideologies of the issue through opposite characters of siblings and adults. Tara a thirteen-year-old girl is the opposite of her seventeen year old brother Aditya and their father Sivan, supposed terrorist politician, is against ambitious Vispala.

Anil Menon portrays, like a true Science Fiction writer, the element of romance very effectively. First is Adi’s meeting with the posse, through the illusion pod at the Bodz. Adi is desperate to meet the posse which consists of a group of biotech scientists working on the immune system of sharks. Vispala leads the project. Secondly, the Experience Lab is described in a highly romantic manner. It is used for
history class. Mrs. Walekar is covering the section on key Revolutionary Movements. She supplements the cause with experiences—historically accurate virtual reality simulation of events by tracking characters. Tracking one character is to see and hear an event from that person’s point of view. There is supercomputer which insists on one student one point of view rule. Tara gets Baptiste, an invalid, retired soldier defending the Bastille. Tara lowers the visor and begins to track Baptiste’s point of view. Ria gets comrade Isabeau Tourney, a woman. When Tara and all students recover from the events of a brutal July day 250 years ago, students become curious to know what happened next. Mrs. Walekar then goes to May 5th 1789, the meeting of the Estates General 70 days before the fall of the Bastille. It was the cause of starting the French Revolution. Thus the Experience Lab is a highly innovative element of romance. The writer sets the story in the year 2040 and gives palpable realistic feeling through both the incidents, illusion pods taking to Lahu and the Experience Lab. He depicts NURTH Island, transhumans, genetically born Ria and Francis, genetic parrot, information transformer devices like eyelids-lens, flying car- Lynx are all appear to be suitable characters, events and things of romance genre. Menon does not emphasize these in the text to point out their existing quality is tangible in the year 2040. Other realistic thing in the novel is local or setting which is Pune. Menon presents many details of life in Pune 2040. Tara and her friends eat ice-cream at Appa Balwant Chowk, tantalizing mention of Shaniwarwada, the old seat of the Peshwas. Though there is no mention of Misal Pav, Pitha Bhakri, Bhel, Sabudana Khichadi, Chitale Bandhu Bhakarwadi, but the mention of Idalis, Madras Coffee, Sanskrit rapping, Pizzas are very much in hot list. The book realistically captures everyday noise, traffics, landmarks, and the people. Anil Menon may be a deleting few things from the menu in 2040. Technology dominates every part of human life. Life and setting in the novel are realistic. Pune is the next IT (Information and Technology) city which is realistically presented by the writer.

Anil Menon depicts characters realistically as human. From characterization point of view all characters are credible even though the story is set in 2040. Through Adi the writer probably handles the issue of migration. Young students of India are aspiring to pursue their careers in western countries. Adi’s desire of migration could be seen in this context. Ria and Francis are gene designed, born on Nurth but their behavior, action, intention are very much human. Though their eyelids have the
uniqueness that can transform information but they live humanly with Tara and her family. The writer’s wit and intelligence play an important role in introducing high tech devices like morphed phone, AI with flying car, AI in home, skin transforming makeover, driverless rickshaw.

The novel aptly illustrates local farmers’ issue of grain. Apart from migration, the author tries to bring out the local politics of Pune. Sivan wants to make genetics affordable for farmers in an ethical way to public good and Vispala wants it for control and power. Sivan being an expert genetic scientist gives up Vispala’s the Season Project mainly for ethical reasons. Vispala works with a genetic company that aims at tying the farmers forever to the organization. Sivan heads the Free Life Movement and sets Dharma protocols, a set of laws designed to check misuse of genetic modification and contamination of natural stock. On the contrary Vispala tries to stop the movement. Thus Anil Menon points out realistically how a multinational called the Mother Earth has had a stranglehold on the seed supply. Farmers were forced to purchase seed from Mother Earth because the native seed could not handle the new climatic conditions. So Sivan goes against the Mother Earth for the better life of farmers. The writer here realistically handles this problem. What the author does is that he uses all probable scientific devices to present the contemporary issues. The personal lives and relationships of all characters are presented as two conflicting ideas and the material consequence of biotechnology or genetic engineering, Thus Anil Menon maintains the balance of romance and realism in his Science Fiction The Beast with Nine Billion Feet.

4.11. Prophetic Vision and Change in Social, Political, Cultural, Tradition of the Universe.

Like a true Science Fiction writer, Anil Menon anticipates changes in the social political, cultural, and tradition of the Universe due to development in science and technology in the existing world. Writers of Science Fiction calculate both the positive and negative, some drastic and some average and some effective and ineffective changes in their work of Science Fiction through their prophetic vision. As discussed earlier in (1.4.10), the prophetic vision of a Science Fiction writer deals with the need to change the scientific, technological, social, political, economical, cultural tradition of the existing world. It is observed that many Science Fiction
predictions come true with the passage of time and with the contemporary developments in science and technology. The writer goes with the form of mundane Science Fiction which is characterized by its setting on Earth or within the existing solar system. It focuses on stories set in near future with a believable use of technology and science. Anil Menon believes that there are plenty of opportunities in mundane Science Fiction to anticipate changes in social, political, cultural, technological, and scientific tradition of the universe. Therefore he uses his wit and intelligence sharply to imagine some changes in the future in the city of India i.e. Pune. Pune is known as the IT hub. He visualizes that in 30 years subtle changes in science and technology will occur and human life and relationship will be affected due to these changes. Moreover Anil Menon’s anticipations appear real as far as the use of technology is concerned. First, he projects a reformation in communication technology. All characters in The Beast with Nine Billion Feet are, by and large, affected by the conflict of genetic engineering ideology and its ethical and physical consequences. While putting this idea, the author shows that in Pune in the year 2040, characters will be habituated to the use of advanced communication technology and devices. Tara and Adi have cell and visor respectively that can connect to AI at home. Tara’s cell resembles a credit card and can change to a bracelet, wristwatch, hand held fan and a toy-sized hand bag Adi’s visor can recognize the text. The author thus projects how Pune kids are using high tech devices for communications. Secondly, the writer visualizes a home which is technologically advanced with AI-Artificial Intelligence in it. This AI controls several vital programmes namely, regulating the thermostat, solar-power generation, security alarms and announcements or communications. Anil Menon presents this device humanly and calls it House Brain. The third device is flying car-Lynx of Vispala/ Mandira. It transports its users from one place to another by offering greeting. It requires praise, compliments for the smooth functioning. It drops Tara at her home and greets her good night. Fourthly, the illusion pod is another technologically advanced device that the writer includes in his prophetic vision. Adi loves to live in virtual games at the Bodz. His ex-boss Yeshwant orders him to give immune shots to Godzilla- the supercomputers that run entertainment and exercise machineries including Illusion pod-is a standard version of the motion simulators used to train astronauts. The fifth prophetic change could be the function of lens or eyelids that can transform information virtually. Both Ria and Francis have implanted lens that can share information link to locate their position
and communicate with their mother Vispala and AI at home. Vispala controls their lens implants. She offers Adi such a type of lens. Adi wonders when he realizes the sensing function of the lens. He can feel the perfume of Vispala through the lens. Thus the writer visualizes positively the change in eyelids - information sharing eyelids that small kids are using with effect. The sixth change that the author anticipates is the photonic mirror and modern high-tech salon makeover. Because of new modern Molecular cosmetology in which a genomic protein analysis can be done, Tara changes her skin colour and tone to find out why her father is being kidnapped by Mandira. She wants to look like Ria and therefore she makeovers by using modern cosmetology. After that she watches her face into Salon’s Nigerian-made ‘photonic mirror’ that could flex surfaces, change resolutions, zoom into specific areas, analyze skin texture, and compose poetry and so on. The author presents a variety of functions of a mirror and how it is used for entertainment purpose as well. He projects qualitative life standard of people in the year 2040 by assuming some changes in society. Seventhly, an equally transforming device is the Experience Lab that Anil Menon projects. It is a historically accurate virtual reality simulation of events by tracking a character. In the Experience Lab, each student is allowed to track one character from a historical event and see and hear an event from that person’s point of view. Tara, Ria, Francis and their classmates love to experience the events from history. Menon by depicting the Experience Lab probably puts forth the view to change our stereotype attitude of history and accept some good things in the present and future from history for the betterment of humanity. Eighthly, the author projects the changes in transporting device-driverless automat or rickshaw that in 2040. When the Vermillion wins the election, it becomes difficult for Tara to walk on roads. When Tara shakes pebble out of the shoe her waves are read by driverless electric automat. It starts circling around her. It asks her sitting position, address and so on. Tara finds no option and travels in it. It is high-tech transport vehicle that Menon picks for 2040 travelling that need to use only credit card for travelling. Thus Anil Menon believes that there can be positive changes in transport facility to sort out the contemporary problem of traffic in Pune by introducing flying car and driverless automat. The most important change Menon visualizes is the issue of genetic engineering and its impact on human life through Vispala’s Season Project, the immune system that can control age may be of 20 years, 50 years or centuries. For this purpose she hires expert geneticians and assigns them works in groups. Adi or Zal
becomes one such genetician, partly because his father Sivan is almost successful in turning the Season Project into reality but quits it on moral and ethical principles on Nurth. NURTH is an artificial island. It is new and is 30 to 40 years old. All immigrants live on NURTH. But Ria and Francis are novae, the new ones because they are born there. Vispala believes that longevity is possible for humans to achieve. The author prophesies that transhuman qualities among humans is possible through the Season Project and genetic engineering. Through the characters Ria and Francis Menon presents the view:

All a transhuman wants is to be free to choose anything and everything. They like options. The more, the better, more flexibility. Transhuman think the next step in evolution is to transcend the limitations of the human body, limitations of our senses our thinking, our structure, everything. And they rely on technology to show the way.  

Anil Menon figures out great possibilities and potentialities of human beings. Actually in the present scenario the hidden desire of mankind is to have options and scientists are working very hard on the same. They try to meet human expectations and limitations of senses, body structure by introducing various technological devices to aid humans in transport, communication and so on. In fact Anil Menon makes a number of prophetic visions in his book and sees the possibilities of their transformation into reality. He is very much sure, as if, his vision of change in social, political, technological, and cultural tradition will come into force by 2040. in Pune because all devices that Anil Menon shows to us appear to be real, tangible, palpable, believable, possible, and probable in the world of 2040, in Pune. Thus the researcher believes whatever Menon has put forth in visualizing the future of Pune, one of the fast developing Indian metropolitan cities, and IT- Hubs, will be likely to change in its social, political, cultural context. While depicting social, global and ethical issues Menon refers to the age-old battle of control and power, as well as knowledge and of hegemony.


Anil Menon’s *The Beast with Nine Billion Feet* is a mundane Science Fiction. Science Fiction suffers from a criticism that the form has recurring or repetitive
themes. Mundane form deals with daily life of the existing world on Earth in the near future. Menon sets the story in the near future, i.e. 2040 Pune, the future is almost palpable and credible. Apart from much developed metropolitan cities like Delhi, Bangalore and Mumbai, Menon selects Pune as the setting of his novel mainly, because it has become the IT hub. The story revolves around the issue of genetic engineering which is not a new topic for readers of Science Fiction. But what is unique about the theme is its presentation and suitability in the Indian context. Earlier Aldous Huxley in his work *Brave New World* handles the issues related to genetic engineering. Anil Menon puts two opposite ideologies of genetics and makes the text open ended so that readers can decide which ideology of genetic engineering is more suitable, realistic and acceptable to the human race and which is not. From the first chapter it becomes clear that there are ‘opposites’ of characters involved in two opposite ideologies of genetics. Siblings, Tara 13 years old, and her brother Aditya, 17 year old, are involved in these two ideologies. Similarly the siblings’ father Sivan believes genetics should be used for the betterment of society and farmers and it should be bound by moral, ethical rules. He heads the Free Life Movement. Vispala on the contrary believes that genetics is the future of the world to overcome human limitations. She wants to use genetics engineering for control and power. Her Season Project implies this ideology. She wants to stop Sivan’s movement. Thus Sivan and Vispala represent two opposite poles of genetic engineering. Menon deliberately shows how human relationship is deeply hurt as one of the ethical consequences of genetic engineering. Nurth-Migration- a social problem of contemporary age is also focused in the text.

Thus Anil Menon is witty in handling the issue of genetics. The researcher strongly believes that the novum is the desire of man to live a longer life by controlling ageing, no-matter its adverse effects, he wants to be immortal. It is one kind of greed after all. Thus the author of *The Beast with Nine Billion Feet* handles the genre of Science Fiction in the Indian context successfully.

4.13. Conclusion

It seems that Anil menon looks at Science Fiction as a mode rather than a genre. He is visualizing how the mode of both science and science fiction in Indian
context will shape or develop life positively, scientifically and technologically. The researcher opines that Anil Menon uses all the parameters of science fiction very forcefully and effectively.
4.14. References

3. Ibid. 82.
4. Ibid. 83.
5. Ibid. 96.
6. Ibid. 209.
7. Ibid. 230-231.
8. Ibid. 18.
9. Ibid. 213.
10. Ibid. 250.
11. Ibid. 75.
12. Ibid. 125.
16. Ibid. 96.
17. Ibid. 213.
18. Ibid. 228.
20. Ibid. 213.